Report of an Independent Audit of Forest Management on the English River Forest for the Period 2005 to 2010

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1.0 EXECUTIVE SUMMARY

A team of five auditors carried out an independent audit of forest management on the English River Forest covering the period from April 1, 2005 to March 31, 2010.

The English River Forest has been managed through this period by AbitibiBowater Inc. under the auspices of a Sustainable Forest License (SFL) (#542454) issued by the Minister of Natural Resources. Forest operations have been conducted as prescribed in a 20-year forest management plan (running from April 1, 2004 to March 31, 2024 and the second 10-year plan starting on April 1, 2009 and ending March 31, 2019). These plans were authored by the Company, but were the product of planning processes conducted jointly Company and Ontario Ministry of Natural Resources (OMNR) personnel. The audit examined compliance with the terms and conditions of the SFL and reviewed the OMNR's performance in meeting its obligations on the Forest. The audit included an extensive review of the plans and records of forest management activities, along with field verification visits, to areas where a variety of forest management activities occurred during the audit period. Public input was solicited through a public mailing, newspaper advertising, and mail-in surveys.

This audit report identifies 17 recommendations aimed at improving the management and administration of the English River Forest.

Five recommendations have targeted the forest management planning process. Ontario Ministry of Natural Resources has been requested to ensure the silvicultural effectiveness monitoring program is tracking regeneration of conifer stands to meet caribou habitat requirements. The Company and OMNR have been asked to improve their access management. The Company has been requested to include its two pass harvest option in its silvicultural ground rules, and confirm the status of red pine inventory on the Forest. The auditors have recommended that OMNR staff should not act as forest management planning team members and also as plan reviewers.

Eight recommendations have been issued concerning forest operations. Compliance records between OMNR and the Company need to be reconciled as there are a number of harvest blocks on the Forest that are in a suspended category. The Company is required to improve its debris management practices for both slash piles and chipper piles. The Company has been requested to improve its road maintenance practices in order to reduce the possibility of erosion and to ensure closed roads are effectively bermed.

The auditors have recommended that the Company and OMNR are provided with copies of new inventory imagery as soon as possible. This imagery still needs to be processed for use as a long term planning tool, but the imagery itself should be useful for improving operational decisions.

The auditors have recommendations to improve the procedures supporting the compliance program on the Forest. While the compliance inspections were very thorough, there are gaps in how that information is managed by the two parties.

The auditors noted a shortfall in the renewal program, and have recommended that this be rationalized.

Finally, the OMNR has been asked to revise the wood supply commitments from the Forest to reflect current demand.

Overall, this audit recorded a significant improvement in performance from that noted five years ago. The Company and OMNR have worked diligently to address deficiencies previously noted. The audit confirms that this is a well-managed forest. Technical aspects of forest management are completed in a satisfactory manner. Communication between the various stakeholders on the Forest is very strong and relations are professional, positive, and progressive. AbitibiBowater Inc. is satisfactorily meeting the terms and conditions of the SFL. Ontario Ministry of Natural Resources is also meeting its overall responsibilities associated with its role in managing this Forest. The audit team confirms that, based on the evidence reviewed, management of the English River Forest was in compliance with the legislation, policy, and regulations that were in effect during the 2005-2010 audit term. The English River Forest is being managed sustainably. The audit team recommends that the term of the SFL be extended for an additional five years.

2.0 TABLE OF AUDIT FINDINGS

Recommendation on Licence Extension
The audit team concludes that management of the English River Forest was generally in compliance with the legislation, regulations, and policies that were in effect during the term covered by the audit, and the Forest was managed in compliance with the terms and conditions of the Sustainable Forest Licence held by AbitibiBowater Inc. Forest sustainability is being achieved, as assessed through the Independent Forest Audit Process and Protocol. The audit team recommends the Minister extend the term of Sustainable Forest Licence # 542354 for a further five years.
Recommendations Directed to the SFL Holder/OMNR District(s)
Recommendation 1: Ontario Ministry of Natural Resources, in cooperation with AbitibiBowater Inc., will ensure that silvicultural effectiveness monitoring to assess the achievement of the objective for successful regeneration of conifer stands in the caribou zone is on track and will be ready for reporting in the 2011-2012 Annual Report.
Recommendation 2: Ontario Ministry of Natural Resources, both district and region, with the assistance of AbitibiBowater Inc. should determine the procedure for measuring the indicators for access management, including an appropriate road use classification as required by an adaptive management approach.
Recommendation 3: AbitibiBowater Inc. should confirm that the apparent decline in the red pine working group since the 2004 FMP is an artifact of the inventory and not a true silvicultural issue.
Recommendation 5: AbitibiBowater Inc. shall employ more effort to apply its debris management standard operating procedures with increased rigour.
Recommendation 6: AbitibiBowater Inc. shall ensure that areas treated with natural regeneration are reported in the annual reports in accordance with the requirements of the Forest Management Planning Manual and the Forest Information Manual. Furthermore, the Company shall review its harvest and silviculture databases to ensure that all backlog areas have been assigned a renewal treatment and that unreported areas are documented and reported in the next annual report.
Recommendation 7: AbitibiBowater Inc. shall ensure chemical tending block boundaries are verified prior to treatment and examine application files immediately to ensure that chemical applications have been applied within approved target areas.
Recommendation 8: AbitibiBowater Inc. shall ensure that the objectives of the pre-commercial thinning treatments are clearly understood by contractors and that the work is performed under close supervision.
Recommendation 9: Abitibi-Bowater Inc. shall ensure that all road maintenance contractors and workers receive appropriate training on proper grading practices in order to reduce or eliminate the formation of "false ditches"
Recommendation 10: AbitibiBowater Inc. should use more berms and other means when feasible to reduce unwarranted access to completed harvest blocks to prevent damage to established trees and enhance road rehabilitation
Recommendation 12: Ontario Ministry of Natural Resources in Dryden (Ignace Area) and AbitibiBowater Inc. must be more vigilant in ensuring that all compliance reports submitted by each respective organization are submitted within the timeframes outlined in the Forest Information Manual.
Recommendation 13: AbitibiBowater Inc. shall develop an internal tracking system to ensure that all operations are inspected for compliance, in accordance with the requirements of *The Forest Compliance*

Handbook and the Company's Compliance Plan.
Recommendation 14: Ontario Ministry of Natural Resources (Dryden) and AbitibiBowater Inc. shall jointly resolve the longstanding "open" compliance issues to satisfactory conclusions and reconcile their databases that record the number and status of the "suspended" operating blocks. Both organizations shall meet regularly for the purpose of monitoring progress on resolving issues related to the suspended blocks and updating their respective databases accordingly.
Recommendation 15: AbitibiBowater Inc. shall more closely examine the apparent long-term renewal shortfall and determine the factors that may be contributing to this outcome. A plan must be developed and implemented to correct the shortfall.
Recommendation 16: AbitibiBowater Inc. shall undertake an analysis to ascertain reasons for the low achievement in silviculture success results from recent free-to-grow surveys and make adjustments to their silviculture program to improve the success rates
Recommendations Directed to Corporate OMNR
Recommendation 4: Ontario Ministry of Natural Resources must ensure that forest management planning team members or advisors are not also plan reviewers.
Recommendation 11: Ontario Ministry of Natural Resources should provide access as soon as possible to the new forest resource inventory imagery for operational purposes at a site in northwestern Ontario.
Recommendation 17: Ontario Ministry of Natural Resources shall revise the wood supply agreements listed in Appendix E of SFL #542454 to reflect current wood supply demands.

3.0 INTRODUCTION

3.1 AUDIT PROCESS

An independent forest audit of the English River Forest was undertaken in September, 2010. The objective of the audit was to assess the performance of forest management activities conducted during the five years from April 1, 2005 to March 31, 2010 as measured against the plans, guidelines, regulations, and legislation in force during that period. The audit was conducted in compliance with the *Crown Forest Sustainability Act* (CFSA) (Statutes of Ontario 1994) and fulfills the requirements of the *Class Environmental Assessment Approval for Forest Management on Crown Lands in Ontario* (Ontario Ministry of Environment and Energy 2003). The audit assessed the effectiveness of forest management activities in achieving the management objectives for the Forest. The audit examined the compliance of AbitibiBowater Inc. with the terms and conditions of its sustainable forest license (SFL) (# 542454) for the English River Forest. Note that the SFL was signed by Bowater Canadian Forest Products Inc. which currently operates as AbitibiBowater Inc. The audit also reviewed the performance of Ontario Ministry of Natural Resources (OMNR) in meeting its obligations on the Forest and overlapping licensees working on the Forest.

The audit was conducted in accordance with the Independent Forest Audit Process and Protocol (OMNR 2010) by a team of five independent auditors, consisting of three registered professional foresters (RPF), a biologist/ecologist, and a socio-economist. A list of their qualifications is presented in Appendix 6.

The auditors collected evidence through document review, interviews with staff and stakeholders, and physical inspection of field activities that occurred on the Forest between April 1, 2005 and March 31, 2010. Field site visit locations were selected to evaluate harvest, renewal, tending/maintenance, free-to-grow (FTG) operations, areas of concern (AOC), road construction and maintenance, site preparation, water crossings, wildlife management activities, and other areas of special interest. Additional detail on the audit process and sampling are provided in Appendix 4.

This report summarizes the findings of the audit and presents recommendations that are intended to improve conformance to contractual obligations.

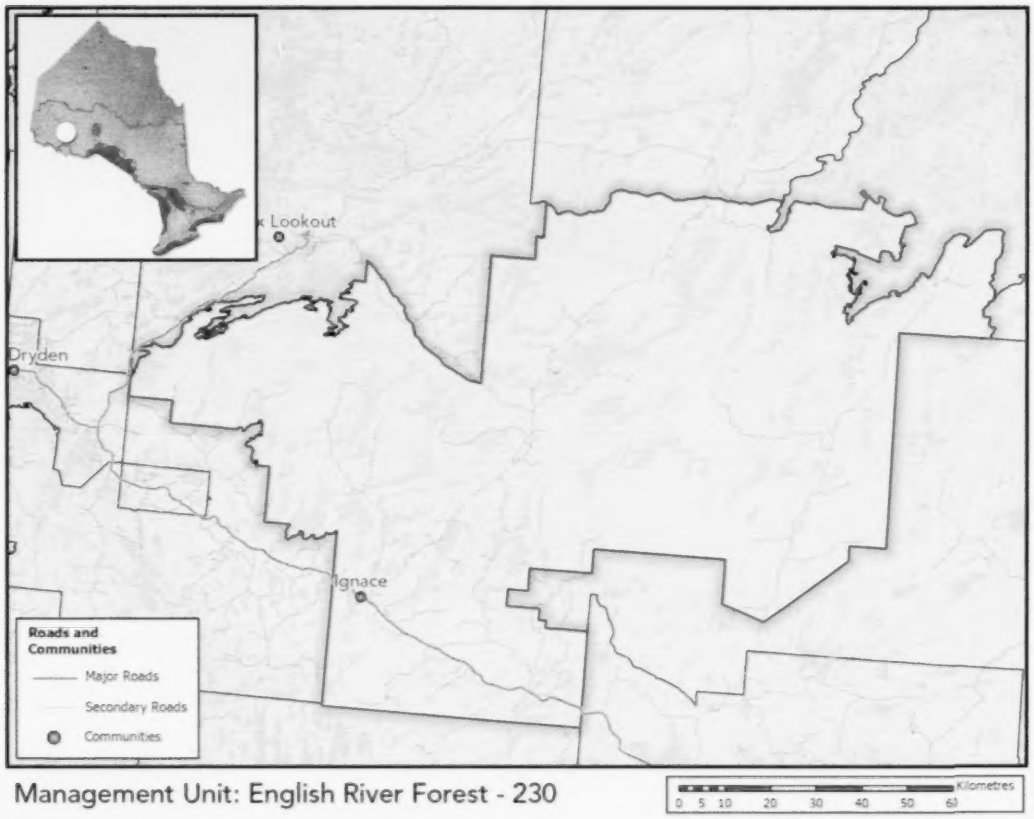
3.2 MANAGEMENT UNIT DESCRIPTION

The English River Forest is located in northwestern Ontario. Its eastern boundary is approximately 200 km west of Thunder Bay. Figure 1 shows the location of the Forest in a regional context. The Town of Ignace is located in the southwest corner of the Forest and the community of Savant Lake is just north of the northern boundary of the license area. The Trans-Canada Highway (Highway 17) crosses the Forest, as do both the Canadian Pacific and Canadian National Railway lines.

The Forest is administered by OMNR out of the Ignace area office, with support from the OMNR district office in Dryden. AbitibiBowater Inc. staff are principally located in Thunder Bay,

although contractors conducting work on the Forest under the direction of AbitibiBowater Inc. live in the area.

Figure 1. Location of the English River Forest.



Management Unit: English River Forest - 230

The total Crown land on the Forest is 1,133,078 ha with 1,032,762 ha deemed managed Crown land. Table 1 shows the breakdown of Crown land by land type.

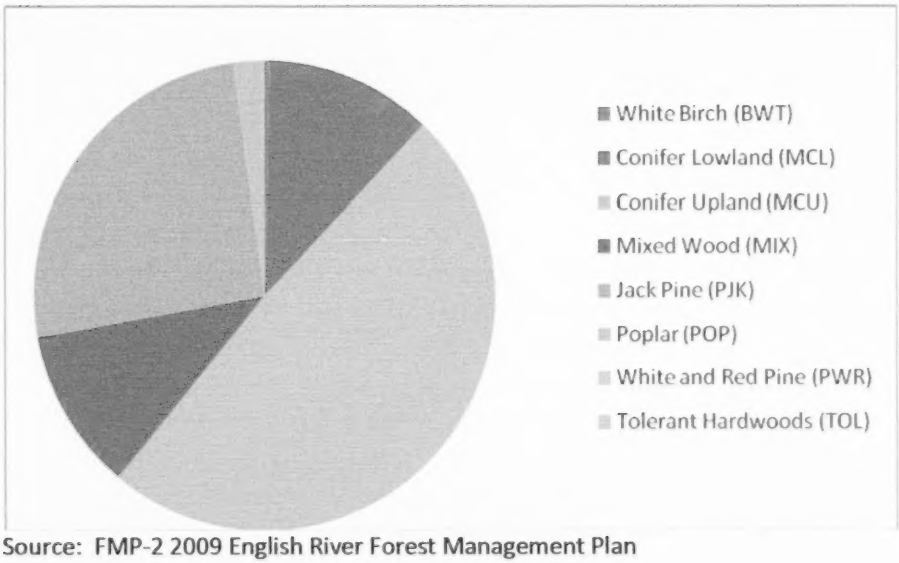
Table 1. Managed Crown Land on the English River Forest by Land Type.

Land class		Area (ha)
Non-forested		
	Water	171,767
	Other land	11913
Forested		
	Non-productive	56,581
	Protection	15,340
	Productive	777,161
TOTAL		1,032,762

Source: FMP-1 2009 English River Forest Management Plan

The Forest is made up of eight forest types as shown in Figure 2. The largest forest type, occupying 50% of the area, is conifer upland. Jack pine occupies 26% of the area, and conifer lowland and mixed wood occupy about 11% each. The remaining forest is made up of relatively small areas of poplar (2%), white birch, red and white pine, and tolerant hardwood forest types, each occupying less than 1% of the productive forest area.

Figure 2. Relative Occupation of Forest Types on the English River Forest.



Source: FMP-2 2009 English River Forest Management Plan

The bedrock geology on the English River Forest is largely influenced by its location on the Precambrian Shield. The bedrock is generally overlain by a thin cover of glacial and post-glacial deposits. In many places the bedrock has been subjected to scouring by the movement of glaciers and glacial deposits have created a number of the dominant surficial geological landforms on the Forest.

Sands and gravels influence the majority of the soil on this Forest. Localized sand and gravel deposits are associated with eskers and outwash fans. Shallow, sandy soils are found predominantly in the northern portions of the unit. The southeastern portion of the Forest contains extensive deposits of sand and gravel. These are important for road construction and often provide good conditions for conifer growth.

Lacustrine deposits in the area consist of layered clays, silty clays, and silts ranging in depth from less than 1 m to over 10 m. These soils are often poorly drained and cover the majority of the west-central portion of the Forest. These clay soils often support good hardwood and mixedwood sites. They also tend to be relatively fragile sites where harvest operations can only occur during dry or frozen conditions in order to avoid soil damage.

Historically, the English River Forest has been an important contributor to the local economy and mills in Dryden, Fort Frances, Sioux Lookout, and Thunder Bay. This benefit has been severely challenged by the economic circumstances of the forest products industry in Ontario, where harvest levels have been reduced to half in 2009 and 2010. The following text, taken from the 2008-09 Annual Report illustrates the impact:

"The Abitibi-Consolidated paper mill in Kenora permanently closed in December 2005. The Bowater sawmill in Ignace indefinitely idled in 2006. The Abitibi-Consolidated Fort William paper mill in Thunder Bay was permanently closed in 2007. The Buchanan Group of Company's Mackenzie Forest Products sawmill in Hudson and Atikokan Forest Products sawmill in Atikokan were idled in November, 2007 and Buchanan Forest Products Ltd (BFPL) declared bankruptcy and ceased harvesting activities during the same month. The Domtar paper machines in Dryden permanently closed in 2008. The Domtar sawmill in Ear Falls permanently closed in 2009."

AbitibiBowater Inc. filed for court bankruptcy protection in Canada and the United States (Chapter 11) in April 2009.

As will be noted elsewhere in this report, these events had an impact on virtually all of the timber-related management objectives on the English River Forest.

The forest resource inventory (FRI) for the Forest is relatively recent. New FRIs were completed in 2003 for the Brightsand and English River Forests, the component forests that were amalgamated in 2004 to form the current English River Forest. These have been updated using aerial photography, satellite imagery, and operational records.

The Forest supports an active recreational industry. There are approximately 78 tourism operations within or adjacent to the Forest. It has a large network of canoe routes, supported by 15 documented campsites and 55 identified lake access points. Cottaging, berry picking, bait fish harvesting, hunting, and fishing are all important activities that rely on the wellbeing of the English River Forest.

The Forest has the typical array of boreal wildlife species, including moose, bear, wolves, lynx, marten and a wide variety of songbirds. Of particular note is the presence of woodland caribou. Woodland caribou is designated as a threatened species under the Committee on the Status of Endangered Wildlife in Canada, and there are considerable demands on the forest industry to attempt to minimize the impacts of its activities on caribou. Moose and American marten are managed as featured species.

3.3 Current Issues

The 2009 forest management plan (FMP) includes a description of five issues that are of particular concern to this forest. They included:

1. Harvest allocations from the previous planning period which were not economical to harvest. The planning team discussed this issue through the production of the 2009 FMP and provided "extra scrutiny" of the available land base to ensure low productivity stands, inoperable peninsulas, islands, and hardwood areas were not considered for operations.
2. A report issued by a non-government organization called for an immediate suspension of all forestry operations in the woodland caribou range. The planning team opted to follow the direction provided by the Forest Management Guidelines for the Conservation of Woodland Caribou: A Landscape Approach.
3. Harvest was planned in previously unaccessed tourism areas. This was, at least in part, driven by the need to defer harvest areas as part of caribou habitat management. The plan indicates there was significant effort on the part of both tourism and company operations to find compromises. Promised actions included deferred harvest and timing restrictions on forest operations.
4. Hardwood utilization was an issue. There is not a steady market for hardwood timber from the Forest; this has not improved since the plan was written. The market for softwood is also poor.
5. The previous independent forest audit found deficiencies in planning and performance and did not recommend license extension.

3.4 Summary of Consultation and Input to Audit

A survey was sent to 563 stakeholders on August 1 using the mailing list that the OMNR District maintains for the English River Forest. The audit team received 46 responses to the survey by mail and three by e-mail. The auditors placed advertisements inviting comment in one major daily newspaper and one local paper. Members of the Local Citizens' Advisory Committee (LCAC) were interviewed, as were members from each of the First Nations communities with an expressed interest in the English River Forest. A more detailed summary can be found in Appendix 4.

4.0 AUDIT FINDINGS

This section provides a summary of audit findings for each principle. Detailed discussions for each recommendation are found in Appendix 1.

4.1 COMMITMENT

According to the guidance provided by OMNR, the commitment principle is deemed to have been met since the forest is certified under the Sustainable Forestry Initiative® certification standard. The audit confirmed that both organizations have clear policies that identify a commitment to the sustainable management of the English River Forest. These documents are available for view by employees, stakeholders, and interested members of the public.

4.2 PUBLIC CONSULTATION AND ABORIGINAL INVOLVEMENT

The Local Citizens Advisory Committee (LCAC) is comprised of individuals with a mix of interests including: the general public, remote tourism, road-based tourism, trapping, the Town of Ignace, Lac des Milles Lac First Nation, and the forest industry. All the LCAC members indicated that the committee contains a good mix of interests and opinions.

The LCAC was established and operated according to the requirements of the Forest Management Planning Manual (FMPM). While the LCAC is small by the standards of many citizens' committees, more members actively participated towards the end of the audit term than at the beginning. The OMNR may want to consider changing the terms of reference which restrict membership to between eight and ten individuals in order to increase the size of the LCAC and attempt to recruit more, and younger, members from the community.

Members of the LCAC indicated that they were very satisfied that all relevant and key aspects of forest management (i.e., annual reports, plan amendments) are brought to the group for consideration.

Some LCAC members raised a few very specific issues with respect to forest management. Issues such as slash piles, utilization, and herbicide use remain outstanding concerns for a few members. Some concern was also expressed about the lack of economic benefits to Ignace from the forest industry as there are currently no mills located in or near Ignace and no contractors operating out of the community.

Two tourist outfitters invoked the issue resolution process because of concerns about the impact of forest management activities on their operations. Both processes were carried out according to the FMPM and culminated in decisions by the Regional Director. Significant efforts were made to address the concerns of the outfitters. Both of the LCAC observers to these two issue resolution processes considered the processes to be very well balanced.

There are three First Nations with traditional territory in the English River Forest: Lac des Milles Lac First Nation, the Ojibway Nation of Saugeen, and Wabigoon Lake First Nation. Interviews during the audit were held with several individuals representing Wabigoon Lake First Nation and an individual representing Lac des Milles Lac First Nation. Several attempts were made to set up a meeting with the Ojibway Nation of Saugeen but none of the calls were returned.

None of the First Nations chose to follow the native consultation process during the preparation of the 2009-2019 FMP. Lac des Milles Lac First Nation chose to have someone on the planning team however, as a result of extraneous circumstances, this individual could not stay on the team during the course of plan preparation. Meetings were held at both the Ojibway Nation of Saugeen and Wabigoon Lake First Nation.

Both Lac des Milles Lac and Wabigoon Lake First Nations indicated that their values are identified and protected on the Forest. While the Ojibway Nation of Saugeen has never provided any values to OMNR, there is no record of any complaints about impacts on their values during the period of the audit. Lac des Milles Lac First Nation indicated that they are very satisfied with how their interests are addressed by both OMNR and AbitibiBowater Inc.

AbitibiBowater Inc. has continually supported the Wabigoon Lake Tree Nursery (Wabigoon Anishnabe Gitigewin) by purchasing a large number of seedlings each year. Much of the purchase is directed towards the English River Forest. There was no harvesting during the period of the audit on the Forest by First Nations companies.

Wabigoon Lake First Nation, AbitibiBowater Inc., and OMNR were involved in negotiations around economic opportunities in the 2001 to 2006 period. Wabigoon Lake First Nation has been involved in the development of a value-added mill in the Dryden area for several years. This proposed mill does have a wood allocation but is not reliant on wood from the English River Forest. In a discussion with the audit team, the representative from Wabigoon Lake First Nation indicated that they may be interested in an allocation in the future. Some discussions have also been held between AbitibiBowater Inc. and Wabigoon Lake First Nation on other potential economic opportunities.

Wabigoon Lake, Lac De Mille Lac, and Saugeen First Nations have all had youth from their communities participate in the First Nations Ranger program that provides an employment opportunity for First Nations students who are pursuing a career in the field of forestry. This program is supported by AbitibiBowater Inc..

Overall, the involvement of the First Nations in forest management planning was commensurate with the interests expressed.

4.3 Forest Management Planning

The planning team for the 2009 FMP operated effectively. Based on a review of planning team minutes and the results of the previous independent forest audit, the improvement in planning team performance was remarkable. AbitibiBowater Inc. and OMNR staff who participated in this always difficult exercise deserve commendation.

The FMP has an integrated suite of objectives that meets appropriate wood supply and conservation goals for the Forest. They share a set of measurable targets. For example, the objective for access includes targets to decrease the road density below the 2009 plan start level of 0.856 km of road/km^2 of productive land and to reduce the road density in the caribou zone from the 2009 plan start road density of 0.849 km of road/km^2 of productive land.

Achievement of forest renewal targets will be measured through regeneration success. The FMP highlights the importance of meeting these targets by stating "Because this is such an important objective, assessment of achievement of this objective will also occur in the Year 3 Annual Report (2011-12)". It was evident that OMNR and AbitibiBowater Inc. are not confident about the silvicultural effectiveness monitoring for conifer success. A recommendation has been issued requiring OMNR to ensure the silvicultural effectiveness monitoring program is effective. (Recommendation 1)

A commitment to adaptive management for species such as caribou requires the ongoing monitoring of important indicators, such as road density, to assure achievement. The OMNR and AbitibiBowater Inc. will soon need to determine the completion or closing out of "A" blocks, prior to moving to "B" blocks, in the Dynamic Caribou Habitat Schedule – the mosaic. To do this, the methodology to measure road density should be in place and confirmed within the FMP. The auditors are recommending that the procedure and information necessary for determining achievement of this indicator be prepared immediately. (Recommendation 2)

The planning process identifies ten wildlife species as surrogates for general habitat management and sets a target to maintain habitats for each within 20% of the range of natural variation. The plan for the English River Forest was unable to meet this target for all species in the near term (40 years). Most notable is a decline in habitat for species favouring older forests, such as black-backed woodpecker, great grey owl, and marten. This is due to the current age class structure of the Forest and representation of natural disturbance in the model. As age classes normalize through time, the habitat levels for these species rebound and remain relatively constant. The planning team has taken the right approach in allowing some declines in the selected species in the first four terms, followed by a rise over the long term. This is typical of the age class gap caused by normalization. The planning team considered that the natural benchmark model scenario (zero harvest) shows the same trend of decreasing amounts of habitat for these species, and this does help to show evidence of the natural shifting of age classes in the Forest.

Old growth targets set in the 2004 English River Forest FMP were considered by the last auditors as an "under-achievement". The planning team and advisors set out to derive more appropriate old growth desired levels and targets for the 2009 FMP. Although there are some long term issues and the relative level of old growth is still low, the planning team did reach a reasonable balance given the current forest structure.

The FMP objective to enhance infrequently occurring species, such as red and white pine, is being addressed at the site level. The strategy of leaving mature pine in open areas will ensure an increased component of white pine and, in some cases, red pine in the future forest. Implementation is carried out reasonably well during operations.

The completion of preliminary wetland evaluations was well done. This is a useful basis for the determination of risk to other values, which tend to congregate around wetlands.

Marten core area requirements are met, despite some fragmentation of the Forest. The marten spatial target is 10-20% of the Forest, which has the capacity to produce marten in core areas 3,000-5,000 ha in size, each composed of a maximum amount of suitable habitat by 2029. The FMP delivers 15.4% of the Forest in core areas in the first 20-year period, 15.3% in the 20-40

year period, and 10.7% in the 40-60 year period. The FMP balances the caribou and marten requirements. The plan openly discusses the problems with not meeting the 75% suitable habitat level within cores. The explanation was reasonable, and reaching a relatively high 15% for the first 40 years compensated to some extent.

Caribou is the only species-at-risk found on the Forest that has documented declining suitable habitat, i.e., older forests, on a regional basis. It is likely that, in its current range, there is more old conifer forest today than will occur in future. This projection in the FMP is based on long term harvest plans in the region.

To address this situation, the spatial target for woodland caribou in the FMP aims to maintain forest in the caribou zone in a condition suitable to allow permanent range occupancy. This can have an impact on the FMP objectives. The auditors have evaluated whether the achievement of the stated objectives is likely using the operational strategies described in the FMP. Full implementation of the plan and all of its objectives in a timely way will be required for the mosaic approach to have a chance to be effective. In particular, good silviculture will produce good caribou habitat.

Wolverine is the only other listed species under the Ontario *Endangered Species Act* (2007) on the English River Forest. The status of wolverine is fully discussed in the plan. The planning team is following guidance from Ontario Boreal Wolverine Project, and will be expected to follow regulatory requirements of the *Endangered Species Act*. There are some rare species on the Forest, although none are under any apparent imminent threat.

A comprehensive social and economic description was provided in the FMP. This included all the necessary requirements in the FMPM. The components of the description included: a demographic profile for wood-receiving communities; forest industry employment information; a forest industry profile; recent mill closures and layoffs data; and a description of industrial and non-industrial uses (e.g., recreation, tourism, energy, mining) of the Forest.

It should be noted that the economic turmoil plaguing the industry has led to continual uncertainty. As such, the context provided in the FMP appears to be dated. This is no fault of AbitibiBowater Inc. or OMNR, but merely an assessment about the state of the industry.

The planning team put a significant effort into the development of the growth and yield model. Growth and yield data was developed by outside contractors to address issues identified in the previous audit. Assumptions used in the model were developed and verified by the planning team and the reasonableness of the model was tested.

The planning team prepared detailed AOC prescriptions that accounted for the resource management requirements of all of the indentified non-timber values.

Information availability was up to conventional standards. Biological surveys or re-surveys (as required) were carried out in areas of future planned forest operations or where AOC prescriptions require monitoring. Information on Aboriginal trapline areas was secured by OMNR. Heritage information was confirmed by the regional archaeologist's office. The audit team did not find discrepancies in the values information.

In the Supplementary Documentation to the 2009 FMP, there was an "apparent" decrease in the red pine working group (PR) since the 2004 FMP. This was identified in the 2009 plan as an issue to be resolved for the next plan. Although white pine seems to be responding to the management strategy, the red pine response is less apparent. The auditors have recommended this be investigated. (Recommendation 3)

AbitibiBowater Inc. issued letters of invitation to licensed resource-based tourism outfitters on the English River Forest to enter into Resource Stewardship Agreements. Two were interested in pursuing these arrangements. The remainder expressed an interest in continuing with memoranda of agreements and/or agreement on AOC prescriptions for their areas of operations.

It should be noted that both of the issue resolution processes associated with the 2009-2019 FMP were from tourism interests; both were resolved and no concerns were raised during the independent forest audit.

The results of the previous independent forest audit were addressed in the 2009 FMP. All recommendations have been actioned and staff have made significant changes in approach to address them.

The audit team noted that many of the OMNR planning team members or advisors also act as reviewers of the plan. Given the interactive nature of FMP deliberations, which result in decisions that are functionally endorsed by the planning team, it seems a conflict of interest for a planning team member or reviewer to also act as an advisor. (Recommendation 4)

4.4 Plan Assessment and Implementation

Harvest

Observations at all harvest locations visited by the audit team confirmed that utilization and harvesting practices were generally good to excellent. While there were some instances of non-compliance found during site visits, they were minor and isolated cases. For example, only a few high stumps were observed in areas harvested during the winter season. Rutting (site damage caused by machinery operating on soft ground conditions) was noted sporadically at scattered locations, however, no extensive damage was observed.

The area harvest was about 60% of that planned throughout the audit period. The reduction was attributed to poor market conditions, particularly in the last two years of the audit period. Overall, harvest volume was 42% of that planned. Expected yield per ha was lower (128 m^3/ha) than projected in the 2004 plan (161 m^3/ha), which substantiates the yield concerns identified in the 2005 independent forest audit.

The 2005 independent forest audit criticized the yield predictions of 161 m^3/ha as being too high compared to the actual yields being realized from operations, which were closer to 130m^3/ha. New yield curves were developed for the 2009 FMP which resulted in an average expected yield of 129 m^3/ha. The auditors note that the most recently completed Annual Report (2008-09) shows that the actual average yield from harvest operations was 133 m^3/ha, suggesting that the revised curves are significantly improved.

Slash and chipper pile management was inconsistent. Most slash has been piled, thereby minimizing the loss of area suitable for renewal. However, most slash piles had not been burned and chipper piles were frequently not spread out sufficiently to meet the Company's standard operating procedure. It was evident that performance in this area improved in the last two years of the audit period, but overall performance requires improvement. The auditors recommend that the Company follow its standard operating procedures for debris management by ensuring that slash is piled and burned and chipper debris is appropriately spread out. (Recommendation 5)

The yearly reporting of natural renewal in the annual reports needs improvement. Sites that are intended for natural renewal may not be reported for a number of years. On several field sites, the auditors found "treatment units" for which no renewal operation had been recorded. This deficiency was noted in the previous independent forest audit and, although it appears that significant improvement has been made to meet this reporting requirement, the auditors believe that additional effort is needed to ensure that all backlog areas prescribed for natural renewal are properly documented and recorded in the annual reports. (Recommendation 6)

Four options were developed in the FMP to deal with the low level of hardwood utilization (avoidance, two-pass harvest, more leave trees, or bypass clumps). The auditors examined two blocks harvested under the two-pass hardwood strategy, which avoids hardwood areas on the first operation then harvests the hardwood on the second pass when a market temporarily arises. There was a concern raised that a two-pass harvest is more a silvicultural prescription than a harvest allocation, and that the second pass may not occur until there are significant silvicultural implications. The auditors suggest the two pass tactic be used sparingly and monitored closely until the operational and silvicultural success of the tactic is established.

Areas of Concern

The auditors completed site inspections of 73 AOC prescriptions during the field audit. Observations were recorded on 45 water quality AOCs (including shoreline buffers and water crossings), areas around 5 buildings (including tourist facilities), 6 moose values, 2 park boundaries, 3 nest sites, 3 permanent sample plots, and 3 other values. Overall, the audit team found AOC prescriptions and protection of other values to be well carried out, with appropriate assignment of prescriptions.

The auditors observed several noteworthy practices. AbitibiBowater Inc. uses a specialized water crossing contractor and this seems to be a very effective practice. The quality of the new water crossings was very high. The contractor has implemented the practice of using surrounding vegetation to quick start establishment of bank stabilization. The Company also uses beaver cones, a large conical sieve placed over culverts that are effective at mitigating the beaver's propensity to plug culverts.

Renewal

There were 32,962 ha regenerated during the 2004-2009 FMP term, which covers the first four years of the five-year audit term (2005-2010). This achievement represents 80% of the planned

renewal program. Planting was 152% of that planned, seeding was 98% of planned, and natural renewal was 58% of planned. This reflects a harvest strategy which focused on softwood dominated sites, which typically require artificial renewal, and deferred hardwood dominated sites, which are more commonly naturally renewed, as a reflection of poor hardwood markets during the audit period. Overall, renewal exceeded harvest by a factor or 41% over the audit period. This reflects the renewal of areas depleted in the previous audit period as well as a reduction in the area harvested, and consequently requiring renewal, in this audit period.

In general, the audit team witnessed an effective renewal program, particularly in conifer renewal where sites are treated promptly with appropriate prescriptions in most circumstances. One exception was a block where timing of the mechanical site preparation and planting treatment was delayed for three years following harvest and consequently was meeting with limited success. The area is now experiencing heavy grass and brush competition and tree survival appears to be diminishing where competition is most severe.

Planted stock was well-spaced with trees being spaced appropriately from existing natural regeneration. Trees were normally planted on sites that were appropriate for the species.

Renewal in the mixedwood and hardwood forest units, which relies on natural regeneration, has been effective. Successful natural regeneration was also observed on fresh-to-wet lowland sites where black spruce and larch predominate.

Tending operations were generally well done. Less area was tended than planned, but this was generally in line with harvest levels. Buffer zones and AOC prescriptions had been effectively implemented, with one exception in the 2004 season. In this instance, areas had been treated outside the block, and these were not detected until a year later. The audit team has recommended that the Company monitor the GPS tracking files more aggressively to detect off-site occurrences more quickly. (Recommendation 7)

The auditors visited one site that had been pre-commercially thinned but it was not conducted to expected standards. It appeared to be a matter of inadequate supervision. Given that the FMP indicates the Company expects to carry out similar treatments in the future, and they had not met the targeted area through this audit period, the audit team is recommending the pre-commercial thinning be implemented more effectively. (Recommendation 8)

AbitibiBowater Inc. has supported its renewal program effectively. Seed collection has been maintained, and seed orchards are being managed in accordance with the FMP.

Access

The audit team viewed numerous roads during the field audit and was satisfied that construction practices for new roads were generally good. Care was taken to minimize environmental impacts and road rights-or-way were generally constructed within the maximum right-of-way allowances. Sufficient cross-culverts were being installed to alleviate drainage issues.

Grading practices were inconsistent, ranging from good to unacceptable. At some locations, "false ditches" were created along the edges of the roadways which have a propensity of

channelling water. These sediment-bearing waters can potentially have detrimental effects on water quality if the channels eventually reach a water body. A recommendation has been issued as a pro-active preventative measure to address these potentially detrimental situations. (Recommendation 9)

The auditors noted that harvest blocks were left open to public access even when they were no longer required for harvest or renewal operations. Vehicle traffic damaged stock that was growing in roadways. This is a small point in overall access and renewal programs. However, in the caribou zone, there should be a particular emphasis on reducing widespread access and impacts to already established stock. A recommendation has been made to make more use of berms to reduce access on closed blocks. (Recommendation 10)

4.5 System Support

Both OMNR and AbitibiBowater Inc. maintain sophisticated information management systems. Document control, backup, obsolete documents, and document storage were all done appropriately.

There was some frustration expressed by managers about the inaccessibility of the imagery for the new FRI. Interpretation of the new FRI may not be available for some time, however there will be more than just timber supply information available. The new imagery will also have benefits for operations staff in harvest layout and road building. The auditors have recommended this digital photography be made available to OMNR and Company staff as soon as possible. (Recommendation 11)

4.6 Monitoring

Compliance Monitoring

The level of monitoring being conducted by OMNR is very good. The attentiveness to reporting and the quality of the inspection reports are among the most complete and informative OMNR reports viewed by the auditors. District staff have conducted verification inspections on 100% of the non-compliance incidents reported by AbitibiBowater Inc. and the overlapping licencee, as well as a number of spot checks and audit inspections on all aspects of forest management activities. A sampling of the OMNR-submitted reports demonstrated that approximately 25% of the sampled reports were not being submitted within the prescribed timeframes.

The Company's compliance monitoring program is effective. Inspection reports being filed to report non-compliant issues are being submitted on time. The submission of routine compliance reports is not as timely, with the auditors noting that approximately 30% of "in compliance " and "non-compliant" reports are not being submitted on time. A recommendation has been made to address this issue and OMNR's shortcoming in meeting the required report submission timeframes (Recommendation 12).

AbitibiBowater Inc. failed to conduct compliance inspections as required on a group of six blocks. This situation was discovered when Company staff were checking to ensure that

compliance monitoring for harvesting activities had been completed before subsequent renewal activities were initiated. A recommendation has been made to address this issue. (Recommendation 13)

Within a compliance program found to be generally satisfactory, there are two matters that require additional effort to resolve. There are longstanding "open" issues, one of which is more than four years overdue, and there are a large number (55) of inspection reports with "suspended" status.

The suspended blocks result from the curtailment of markets for hardwood products since 2008. Many of these blocks were operated by the overlapping licencee (Buchanan Forest Products Ltd.), who declared bankruptcy and is in receivership. AbitibiBowater Inc. has stated that all harvested wood that remains at roadside has been scaled for stumpage dues which have been paid. The situation with the Buchanan bankruptcy introduces more complexity to resolving the issues that remain outstanding on the blocks where they operated.

The auditors have learned that both AbitibiBowater Inc. and OMNR maintain databases on the status of the suspended blocks, however it is apparent that the two databases do not mesh. The auditors recommend that the two parties reconcile their databases. A recommendation to address these matters has been issued. (Recommendation 14)

Silvicultural Monitoring

The audit team confirmed that the boundaries of the sampled FTG field locations had, in most cases, been properly mapped and accurately recorded in the company's reporting system. There were situations where stands had been grouped more than seemed appropriate. The audit team suggests the company review its technique for FTG assessments and confirm the accuracy of stand attribute descriptions.

The auditors examined the long-term harvest, renewal, and silvicultural effectiveness monitoring trends on the English River Forest. A table showing some detail on this discussion is included with Recommendation 15 (Appendix 1).

The data suggests that there is a net annual accumulating area of 1,337 ha that is not being renewed. The untreated area represents a little more than 18% of the total area harvested.

During its field inspections, the auditors did not notice any large areas of untreated cutover. The auditors suspect the renewal shortfall may be attributed to a combination of two factors:

(1) harvested areas being left for natural renewal that have not been documented and reported in a timely fashion

(2) Errors in the harvest and renewal records, particularly with the amalgamation of the former Brightsand and English River Forests

Whatever may be the cause, there is a renewal gap appearing in the data that merits further investigation. The auditors have recommended that the Company examine the long term renewal shortfall and the reasons for the low silvicultural success rate. (Recommendation 15)

Analysis of the results reported in the Year 10 (2008-2009) Annual Report (covering the 2004-2009 period) indicated that the level of silvicultural success overall is unsatisfactory at 29%. The Company commented that the mediocre results may not be as serious as they first appear, but has not carried out any formal examination to establish which specific treatments are not achieving their regeneration standard objectives. The silviculture success rates are cause for concern and merit further analysis into possible reasons for these outcomes. (Recommendation 16)

Despite the shortfall in achieving the planned level of FTG surveys over the 2004-2009 period, the average area being declared FTG annually over the long term as noted in the table in Recommendation 15 appears to be keeping pace with the long term levels of harvest. In fact, the actual survey levels exceed the harvest level, which confirms that the FTG effort is also being directed toward the naturally depleted areas.

The auditors have issued a recommendation (Recommendation 1) that OMNR improve its silvicultural effectiveness monitoring program as part of an effort to ensure that future caribou habitat supply targets are met.

Annual Reports

The annual reports are generally of acceptable quality. The level of analysis and commentary satisfactorily meets the applicable FMPM requirements. There were issues with meeting submission deadlines for the first two years of the audit period, but these have been corrected with more recent submissions. It is evident that AbitibiBowater Inc. and OMNR District are working constructively to ensure improvement in the timeliness and quality of the reports.

The yearly reporting of natural renewal in the annual reports needs improvement. Sites that are intended for natural renewal may not be reported for a number of years. On several field sites, the auditors found "treatment units" for which no renewal operation had been recorded. This deficiency was noted in the previous independent forest audit and, although it appears that significant improvement has been made to meet this reporting requirement, the auditors believe that additional effort is needed to ensure that all backlog areas prescribed for natural renewal are properly documented and recorded in the annual reports. (Recommendation 6)

4.7 Achievement of Management Objectives and Sustainability

Forest sustainability is the overriding goal of the CFSA. The success of forest management activities in meeting that goal has been assessed in terms of meeting the objectives they were designed to achieve. By reviewing planning commitments as detailed in the 2004 and 2009 FMPs against achievements and analysis as reported in the Year 10 Annual Report (Appendix 7) and observations during this audit, the auditors can assess sustainability on the English River Forest.

Management objectives have been included in both the 2004 FMP and the 2009 FMP for forest diversity, social and economic values, values dependent on forest cover, and silviculture. A

more detailed look at these objectives, and the audit team's assessment of how well they have been met, is included in Appendix 2.

The auditors noted that the Company assessed forest sustainability in the Year 10 (2008-2009) Annual Report. This proved to be challenging since the 2008-2009 Annual Report represented the first attempt at evaluating the Forest that was the product of the amalgamation of the former Brightsand and English River Forests. The Company was able to amalgamate older datasets to complete the annual report tables, which facilitated assessing the 2004 FMP for achievement of sustainability.

Forest Diversity

The forest diversity objective includes specific sub-objectives targeting landscape diversity and old growth. The auditors consider progress on these objectives to be suitable. The English River Forest has a significant history of harvest and natural depletion, and that history constrains the effort to develop age class structure targets in the near term. Having said that, the FMPs have clearly set out these targets and operations are moving towards implementing them.

Stand level diversity targets have been accomplished through stand level silviculture, which, where required, has preferred or protected particular tree species (i.e., red and white pine) and the application of AOC prescriptions.

Social and Economic Objectives

Social and economic objectives have been specifically defined for timber production, tourism, fisheries, wildlife, native resources use, resource access, recreation, education and research, and cultural heritage. With the exception of timber harvesting, all targeted goals are either qualitative or difficult to quantify.

The timber harvesting subobjective has been met in terms of providing a continuous and predictable supply of timber. The market-driven reduction of harvest activity has challenged the relevance of this objective in the near term. As noted in the Year 10 Annual Report, "The Abitibi-Consolidated paper mill in Kenora permanently closed in December 2005. The Bowater sawmill in Ignace indefinitely idled in 2006. The Abitibi-Consolidated Fort William paper mill in Thunder Bay was permanently closed in 2007. The Buchanan Group of Company's Mackenzie Forest Products sawmill in Hudson and Atikokan Forest Products sawmill in Atikokan were idled in November, 2007 and Buchanan Forest Products Ltd (BFPL) declared bankruptcy and ceased harvesting activities during the same month. The Domtar paper machines in Dryden permanently closed in 2008. The Domtar sawmill in Ear Falls permanently closed in 2009".

The reduction in harvest due to market demand raises two issues that are largely beyond the scope of this audit. The first is a requirement to assess the economic viability of the wood consumers in an assessment of forest sustainability. This is not addressed in the Independent Forest Audit Process and Protocol and has not been considered in this audit, yet it is an important matter for the evaluation of the sustainability of a forest.

The second consideration is that all planning assumptions supporting an assessment of how this Forest will grow into the next century are based on predictable timber harvest events as the

primary driver on habitat change over time. The current benchmark for evaluation must be flawed if that harvest is not likely to occur. Consequently, the general conclusion of this audit that the operators have met the socio-economic objectives of the FMP is muted by the evidence that the basic interest in harvesting timber has been dramatically reduced.

The actual harvest averaged about 60% of that planned over the five-year audit period. Harvest has occurred in accordance with objectives to protect tourism values, cultural heritage values, non-timber values, recreational values, and other interests.

Values Dependent on Forest Cover

The Company has addressed six objectives that are intended to support the maintenance or improvement of habitat on the Forest. The dominant consideration is for the provision of woodland caribou habitat, one of two threatened species on the Forest. The evidence confirms that the Company and OMNR have applied the best knowledge available in establishing a program that will maintain and improve the habitat for caribou over time.

There is good evidence that other wildlife and fisheries values are being effectively protected. The implementation of AOCs has been very good, and there is sufficient experience across the province to predict that these AOCs are an appropriate technical approach for ensuring these values are maintained. Compliance monitoring is effectively being implemented to ensure adherence to AOC prescriptions.

Silviculture

The auditors issued seven recommendations that directly or indirectly comment on the silvicultural program. Each of them individually addresses a minor deficiency in the program and, it should be stated, so as not to raise unnecessary alarm, that it is entirely likely that modest improvement in a few areas will correct all of the issues noted.

Three of these issues relate to document management. Natural renewal is not being reported as required and the two-pass harvest system, proposed but rarely implemented, should be listed as an exception to the silvicultural ground rules. The GPS-based data from aerial spraying should be evaluated more quickly.

Two of the recommendations are aimed at directly improving growing trees and habitat. The audit has recognized that more rigour is needed in managing slash and debris, which will recover more "plantable sites", as well as improvement in management of pre-commercial thinning. These observations are both based on a small part of the silvicultural program.

The final two recommendations deal with monitoring. The silvicultural effectiveness monitoring program needs to be applied more consistently. It is a program designed to confirm the effectiveness of silviculture, and it has been poorly implemented in many parts of the province. Another recommendation addresses strategic significance, in that the data available indicates a long term renewal shortfall and low silvicultural success.

The auditors balance the recommendations against the generally positive observations made on site throughout the audit. There were very few sites that were not regenerating, which

supports the documented evidence of a relatively high level of *regeneration* success on the Forest at 87% over the 2004-09 period. Ultimately, this is the evidence on which the audit team puts most weight in concluding that the silviculture program being implemented is effective. However, additional analysis of the renewal results are warranted to determine the substandard performance in achieving *silvicultural* success.

The auditors also note that the size and scope of the program, including forest renewal and FTG monitoring, have been implemented in accordance with harvest levels.

The Company has met its trust fund maintenance obligations, and the auditors accept this as evidence that the program has met the requirement for efficiency.

Roads on the English River Forest are generally well established and, with the exception of improvements in management of false ditches addressed in Recommendation 9, well maintained. The audit team concludes that roads on the Forest are located in a manner that reduces their impacts on the forest environment to an acceptable level.

Harvest operations had little visible impact on soil. Rutting, which might be expected in some parts of the English River Forest, was noted on only one site. This is commendable since auditors normally bias their site inspections towards low-lying areas likely to have sensitive soils.

The impacts of harvesting on water quality were assessed at both water crossings and on harvest sites adjacent to aquatic habitat. Operations adjacent to aquatic habitats were consistently within practice standards established for operations in riparian zones.

In summary, the ecological components of the English River Forest, which are most likely to be influenced by forest operations, are being managed in a sustainable manner. The audit team is confident that the English River Forest, if managed as currently planned, will be maintained for the benefit of future generations as proclaimed in the CFSA.

4.8 Contractual Obligations

The audit team reviewed the terms and conditions in SFL #542454 issued to Bowater Canadian Forest Products Inc. currently operating as AbitibiBowater Inc. The auditors noted a high level of conformance with the contractual requirements of the SFL.

The SFL wood supply commitments listed in Appendix E of the licence have been met, but as noted in Section 4.7, demand for the timber is dramatically reduced. Commitments to three companies have been cancelled. The audit has recommended that Appendix E be updated to reflect the current commitment holders. (Recommendation 17)

The 2009 FMP, annual work schedules, and annual reports have been completed as required. There was some difficulty in meeting submission deadlines in the first two years of the audit period, but this has been corrected since then.

There were no operations required for fire or insect control during the term of the audit.

The Company and the OMNR District have diligently addressed the findings of the 2005 independent forest audit. Each recommendation from the audit was carefully considered and action to address each recommendation is either completed or in progress.

The Company maintained an amount exceeding the required minimum balance in its Renewal Trust Fund throughout the audit period, and has no outstanding balance in its Forestry Futures Trust and Consolidated Revenue Fund obligations accounts.

Appendix 3 provides detailed comments on the performance of AbitibiBowater Inc. in meeting its SFL obligations.

4.9 Conclusions and Licence Extension Recommendation

This audit recorded a significant improvement in performance from that noted five years ago. The Company and OMNR have worked diligently to address the significant issues identified on the previous independent forest audit. There were recommendations identified on this audit, but all were comparatively minor in nature.

The forest management planning effort was significantly improved from that noted on the last independent forest audit. The auditors have commended the planning team for completing this challenging program in a positive and professional manner.

There were five items in the planning process that were found to require attention. OMNR has been requested to ensure the silvicultural effectiveness monitoring program is tracking regeneration of conifer stands to meet Caribou habitat requirements. The Company and OMNR have been asked to improve their access management, particularly the management of roads and water crossings that are not within current operational areas. The Company has been requested to include its two pass harvest option in its silvicultural ground rules, and confirm the status of red pine inventory on the forest. The auditors have recommended that OMNR staff should not serve in the dual and potentially conflicted roles as forest management planning team members and plan reviewers.

Operations were found to be generally effective. Harvest utilization in all normal harvest areas was good. Road and, in particular, water crossing construction and maintenance in areas of current operations or areas regularly used by the public was very well done. Renewal operations were generally well done and the auditors consistently observed young stands growing as planned.

Compliance records between OMNR and the Company need to be reconciled as there are a number of harvest blocks on the forest that are in a suspended category. Debris management practices for both slash piles and chipper piles were inconsistent. The auditors witnessed the majority of sites where slash and chipper piles had been effectively disbursed or reduced, thereby reclaiming plantable sites for the renewed forest. However, there were several sites where this was not done, or was not done effectively. The Company has been requested to improve its road maintenance practices in order to reduce the possibility of erosion and to ensure closed roads are effectively bermed.

The audit has recommended the Company and OMNR are provided with copies of new inventory imagery as soon as possible. This imagery still needs to be processed for use as a long term planning tool, but the imagery itself should be useful for improving operational decisions.

The auditors have recommendations to improve the procedures supporting the Compliance program on the Forest. While the compliance inspections were very thorough, there are gaps in how that information is managed by the two parties.

The auditors noted a shortfall in the renewal program, and have recommended this be rationalized.

Finally, the OMNR has been asked to revise the wood supply commitments from the forest to reflect current demand.

It is a weakness in the audit process itself that the necessary listing of deficiencies is not balanced by a similar listing of things done in a perfectly acceptable manner. The audit team's overall conclusion of the state of this Forest is positive.

Communication between the various stakeholders on the Forest has improved and relations are professional, positive, and progressive. AbitibiBowater Inc. is satisfactorily meeting the terms and conditions of the SFL. Ontario Ministry of Natural Resources is also meeting its overall responsibilities associated with its role in managing this Forest.

The audit team concludes that management of the English River Forest was generally in compliance with the legislation, regulations, and policies that were in effect during the term covered by the audit, and the Forest was managed in compliance with the terms and conditions of the SFL held by Bowater Canadian Forest Products Inc. Forest sustainability is being achieved, as assessed through the Independent Forest Audit Process and Protocol. The audit team recommends the Minister extend the term of SFL #5524454 for a further five years.

APPENDIX 1 – AUDIT FINDINGS

Recommendation # 1
Principle 3. Forest Management Planning **Criterion 3.3 FMP Description of Other Parameters of Current Forest Condition** **Procedure 3.3.3-1.** Review the description of other parameters of current forest condition in the FMP by considering implications on the development of management strategies and decisions in the plan.
Background Information and Summary of Evidence: The FMP has appropriate objectives related to landscape pattern or forest diversity indices, including habitat for selected wildlife species, landscape processes, and a description of fish and wildlife resources. It is a well integrated suite of objectives that meets an appropriate wood supply and conservation goal for the Forest. They are tied together with a set of measurable targets. For example, the objective for access includes targets to decrease the road density below the 2009 plan start level of 0.856 km of road/km^2 of productive land and to reduce the road density in the caribou zone from the 2009 plan start road density of 0.849 km of road/km^2 of productive land. The planning team has set the proper direction through this target. One of the FMP's stated objective is to maintain the average species composition (conifer) of forest units in the caribou zone. The achievement of these targets, both for access and conifer retention, in the caribou zone were discussed in the FMP. These targets will be measured through regeneration success and reported in Annual Reports for year 7 (2015-2016) and year 10 (2018-2019). The FMP highlights their importance by stating "Because this is such an important objective, assessment of achievement of this objective will also occur in the year 3 AR (2011-12)". Given the imminent application of the regulations for the *Endangered Species Act*, the same urgency applies for access rehabilitation. Discussions of the audit team with OMNR and the Company about silviculture effectiveness monitoring for conifer success indicated there was still some work to be done and discussion required to determine the definition of silvicultural treatments of conifer stands in the caribou zone.
Recommendation 1: Ontario Ministry of Natural Resources, in cooperation with AbitibiBowater Inc., will ensure that silvicultural effectiveness monitoring to assess the achievement of the objective for successful regeneration of conifer stands in the caribou zone is on track and will be ready for reporting in the 2011-2012 Annual Report.

Recommendation # 2
Principle 3. Forest Management Planning **Criterion 3.3. Management Unit Description** **Procedure 3.3.3 FMP description of other parameters of forest condition.** Review the description of other parameters of current forest condition in the FMP by considering implications on the development of management strategies and decisions in the plan
Background Information and Summary of Evidence: The planning team set a good objective for access control, which is particularly useful because it incorporates most definitions of "linear disturbance". It is not evident that the methodology for measuring road density is in place and this needs to be worked out prior to the reporting period. The audit team does not have advice to give on how this should be measured, but it is apparent some procedures need to be worked out. A commitment to adaptive management for species such as caribou requires the ongoing monitoring of important indicators, such as road density, to assure achievement. For illustration of the problem, the current FMP does not define what a road is, although informally it has been referred to as anything accessible by four wheel truck. The OMNR and AbitibiBowater Inc. will soon need to determine the completion or closing out of "A" blocks, prior to moving to "B" blocks, in the Dynamic Caribou Habitat Schedule – the mosaic. To do this, the methodology to measure road density should be in place and confirmed within the FMP. Discussion with OMNR district and regional staff was informative in describing some of the methods that have been considered to classify roads in a way that will lead to expeditious monitoring. The OMNR needs to turn this discussion into a more practical methodology and ensure its implementation. The audit team is recommending that the procedure and information necessary for determining achievement of this indicator be prepared immediately. AbitibiBowater Inc. remains responsible for all of the roads and road networks identified in the existing roads table, roads they anticipate using during the plan period, and any new roads built during the plan period.
Recommendation 2: Ontario Ministry of Natural Resources, both district and region, with the assistance of AbitibiBowater Inc. should determine the procedure for measuring the indicators for access management, including an appropriate road use classification as required by an adaptive management approach.

Recommendation # 3
Principle 3. Forest Management Planning **Criterion 3.5 Planning of Proposed Operations** **Procedure: 3.5.2 FMP Area of Concern (AOC) Prescriptions:** Review the AOC prescriptions and assess whether adequate information is available for planning.
Background Information and Summary of Evidence: The planning team identified an issue related to information availability and quality for values management. In the Supplementary Documentation (Information on Other Forest Resources -- Values Summary Report section 4.0) there was an "apparent" decrease in the red pine working group (PR) since the 2004 FMP. The decrease in PR from 1,023 ha to 503 ha was identified in the 2009 plan as an issue to be resolved for the next plan. Although white pine seems to be responding to the management strategy, the red pine situation is less clear. The FMP tentatively speculates on some possible explanations for the decline, including the 3,150 ha difference in Productive Forest between terms, as well as possible typographical errors in the PR working group. The resolution of this problem may occur once the new inventory is delivered, although that explanation has not been confirmed.
Recommendation 3: AbitibiBowater Inc. should confirm that the apparent decline in the red pine working group since the 2004 FMP is an artifact of the inventory and not a true silvicultural issue.

Recommendation # 4
Principle 3. Forest Management Planning **Criterion 3.1 Plan Author, Planning Team, Chair and Advisor Activities** **Procedure. 3.1.2 Plan Production Activities:** Assess the effectiveness of the plan author, planning team, chair and advisors
Background Information and Summary of Evidence: An issue that continually crops up is that many plan reviewers are either on the planning team or part of the support team to the effort. The planning team and its advisors develop the plan and participate in all the debates and trade-offs which come with it. This is clearly an intensive effort that examines, in detail, a myriad of factors considered at each stage and step of the plan. The planning process then requires OMNR to conduct a plan review. The OMNR reviewers then issue a list of required alterations, functioning as an order, to change the document. Where the plan reviewers have also been actively involved in plan production, an opportunity is created for the same professionals who participated in the initial plan to overrule the group conclusion. If the review function is to make a proper contribution, the reviewers themselves should not have been active participants in plan production. It would appear to be a conflict of interest for a plan advisor or member of the planning team to also participate as plan reviewers.
Recommendation 4: Ontario Ministry of Natural Resources must ensure that forest management planning team members or advisors are not also plan reviewers.

Recommendation # 5
Principle 4. Plan Assessment and Implementation **Criterion 4.4 Renewal** **Procedure 4.4.1** : Review and assess in the field the implementation of approved renewal operations... including the effectiveness of operations to reduce the areas of slash piles and chipping debris...
Background Information and Summary of Evidence: AbitibiBowater Inc. maintains a standard operating procedure for managing slash and chipper debris that is left at roadside. For those harvest operations where timber is delimbed and topped at roadside, the Company normally requires the operators to pile the resulting slash. These slashpiles are usually burned. For harvest operations where timber is chipped (normally at a centralized location or "chipper pad"), operators are instructed to distribute the chipper debris throughout the harvest block or to make use of the chipper debris in other aspects of the operation (e.g., erosion control along roadside ditches, as fill, or for rehabilitating aggregate pits). The debris depth at chipper pads is to be reduced sufficiently to facilitate regeneration. The auditors found that the standard operating procedure was being applied inconsistently across the Forest. Good examples of debris management were found along the Graham Road while unimpressive examples were viewed at Site 36 and the Woonga Road. At Site 11, the audit team found examples where chipper pads had been spread out and planted, while numerous slash piles remained unburned. Although the area occupied by the piled slash is somewhat minimized (opposed to not piling), the audit team believes the Company should make additional efforts at managing slash by ensuring that the piles are burned in a timely fashion. The auditors encourage the Company to further increase its slash management efforts by more rigorously applying its debris management standard operating procedure.
Recommendation 5: AbitibiBowater Inc. shall employ more effort to apply its debris management standard operating procedures with increased rigour.

Recommendation # 6
Principle 6. Monitoring **Criterion 6.5 Annual Reports** **Procedure 6.5.1.** Examine the annual reports for the term of the audit and assess whether the text and tables is accurate and complete. On a sample basis, as part of the field audit, determine and report on whether the reported information summarizes and evaluates operations accurately and completely as demonstrated by actual field operations.
Background Information and Summary of Evidence: One aspect of the renewal program that requires attention is the yearly reporting of natural renewal in the annual reports. Less attention appears to be paid toward documenting and reporting natural renewal promptly. Sites that are intended for natural renewal may not be reported for a number of years. On several field sites, the auditors found areas for which no renewal operation had been recorded. This practice is not consistent with the requirements of the FMPM and the Forest Information Manual, which requires that areas intended for natural regeneration be reported annually. This deficiency was noted in the previous independent forest audit and it appears that significant improvement has been made to meet this reporting requirement. However, the auditors believe that additional effort is needed to ensure that all backlog areas prescribed for natural renewal are properly documented and recorded in the annual reports. Additionally, this deficiency in reporting may explain the renewal "gap" which the auditors have identified elsewhere in this report.
Recommendation 6: AbitibiBowater Inc. shall ensure that areas treated with natural regeneration are reported in the annual reports in accordance with the requirements of the Forest Management Planning Manual and the Forest Information Manual. Furthermore, the Company shall review its harvest and silviculture databases to ensure that all backlog areas have been assigned a renewal treatment and that unreported areas are documented and reported in the next annual report.

Recommendation #7
Principle 4. Plan Assessment and Implementation **Criterion 4.5 Tending and Protection** **Procedure: 4.5.1** Review and assess the field implementation of approved tending and protection operations. – determine whether tending and protection operations were consistent with locations in approved FMP, AWS and the requirements of herbicide projects (i.e. buffer zones)
Background Information and Summary of Evidence: During the 2004-2005 season, there was an incident where herbicide was aerially applied outside the approved spray blocks at four different locations. An error in the data given to the helicopter navigational system caused the pilot to spray areas that were not to be treated. The over-sprays included buffer areas around streams and a pond (< 1 ha in size) that were not identified on the original forest inventory maps. The non-compliance was considered to be minor and a warning to AbitibiBowater Inc. was issued. The auditors agree with the outcome of OMNR's investigation regarding this incident. There are concerns, however, that this incident was not reported to OMNR and Ontario Ministry of Environment and Energy until a year later. The non-compliance was not noticed until AbitibiBowater Inc. personnel conducted its treatment verification flight in September 2005 and verified it further when copies of the helicopter navigational tracks were examined while preparing the 2004-2005 Annual Report during October 2005. This incident should have been detected and reported much sooner to the appropriate authorities.
Recommendation 7: AbitibiBowater Inc. shall ensure chemical tending block boundaries are verified prior to treatment and examine application files immediately to ensure that chemical applications have been applied within approved target areas.

Recommendation #8
Principle 4. Plan Assessment and Implementation **Criterion 4.5. Tending and Protection** **Procedure 4.5.1 .** 1 Review and assess the field implementation of approved tending and protection operations. – assess whether tending treatments were consistent with the FOP.
Background Information and Summary of Evidence: The auditors inspected an area pre-commercially thinned using brush saws, which was not conducted to expected standards. Crop tree spacing was not consistent and several poor quality trees were not removed. It was apparent that this operation may not have been closely supervised or the treatment objectives were unclear to the contractor. Given that the company expects to continue carrying out similar treatments into the future (1,000 ha/yr – from Table FMP-21, 2009 FMP), it is important that the pre-commercial thinnings be implemented properly to maximize effectiveness.
Recommendation 8: AbitibiBowater Inc. shall ensure that the objectives of the pre-commercial thinning treatments are clearly understood by contractors and that the work is performed under close supervision.

Recommendation #9
Principle 4. Plan Assessment and Implementation **Criterion 4.7 Access** **Procedure: 4.7.1.** Review and assess in the field the implementation of approved access activities.
Background Information and Summary of Evidence The audit team viewed numerous roads during the field audit and was satisfied that construction practices for new roads were generally good. Care was taken to minimize environmental impacts and road rights-or-way were generally constructed within the maximum right-of-way allowances (there were two incidents reported in the Forest Operations Information Program where the rights-of-way were too wide). Sufficient cross-culverts were being installed to alleviate drainage issues. Grading practices were inconsistent, ranging from good to unacceptable. At many locations, "false ditches" were created along the edges of the roadways which have a propensity of channelling water. This can have detrimental effects on water quality should the channels reach a water body. Appropriate steps should be taken to minimize the formation of "false ditches" resulting from sub-standard road grading practices.
Recommendation 9: Abitibi-Bowater Inc. shall ensure that all road maintenance contractors and workers receive appropriate training on proper grading practices in order to reduce or eliminate the formation of "false ditches".

Recommendation #10
Principle 4. Plan Assessment and Implementation **Criterion 4.7 Access** **Procedure 4.7.1.** Assess whether roads have been constructed, maintained, and decommissioned to minimize environmental impacts and provide for public and operator safety
Background Information and Summary of Evidence The audit team noted that harvest blocks were left open to public access even when the roads did not lead to further access. This also had the effect of damaging stock, further reducing the silvicultural effectiveness. Although it could be argued this is a small point in overall silvicultural effectiveness, it is easily accomplished and likely more than just a symbolic effect. In the caribou zone, there should be a particular emphasis on reducing widespread access and impacts to already established stock.
Recommendation 10: AbitibiBowater Inc. should use more berms and other means when feasible to reduce unwarranted access to completed harvest blocks to prevent damage to established trees and enhance road rehabilitation.

Recommendation #11
Principle 5. Plan Assessment and Implementation **Criterion 5.2 Document Control** **Procedures 5.2.1** Assess the organization's information management system processes by considering: • availability of a current version of the relevant documents at all locations where activities essential to the effective functioning of the sustainable forest management system are performed • include whether FIM technical requirements for base and values, FRI, FMPs, AWSs, amendments, annual reports are being met, including electronic submissions
Background Information and Summary of Evidence: There was some frustration expressed by managers about the inaccessibility of the imagery for the new FRI. The calibrated interpretation of the new FRI may not be available for some time; the imagery supplies useful information for more than just timber supply. It is the understanding of the auditors that the new imagery is of particularly high quality and, consequently, will also have benefits for operations staff in harvest layout and road building. The technology to view this digital photography is not available at the SFL level today due to the expense of the hardware required for managing the large amount of information. This recommendation is made because this information is not being fully utilized for the benefit of the resource. The expense for dissemination of the technology will be incurred sooner or later. An opportunity to benefit from that information immediately may help mitigate some environmental impacts. The auditors have recommended this digital photography be made available to OMNR and Company staff as soon as possible.
Recommendation 11: Ontario Ministry of Natural Resources should provide access as soon as possible to the new forest resource inventory imagery for operational purposes at a site in northwestern Ontario.

Recommendation #12
Principle 6. Monitoring **Criterion 6.1 District Compliance Planning and Associated Monitoring** **Procedure 6.1.2 :** Determine whether the OMNR District electronically submitted in MNRs compliance information system to the MNR database and whether they supplied digital FOIR information to the SFL holders in accordance with requirements including timelines specified in MNR procedures and FIM. **Criterion 6.2 SFL Holder Compliance Planning and Monitoring** **Procedure 6.2.1:** Determine whether the FOIP reports have been submitted electronically to the MNR database in accordance with requirements including timelines specified in MNR procedures and FIM.
Background Information and Summary of Evidence: OMNR Dryden, AbitibiBowater Inc., and one overlapping licensee (Buchanan Forest Products Ltd.) submitted their forest operations inspection reports directly to the provincially-sanctioned FOIP, which is an internet-based, interactive computer software program. All reporting is documented in a digital format, which allows for quick access and retrieval. A sampling of the reports filed by OMNR staff confirmed that reporting procedures outlined in the respective compliance plans are generally being followed. The compliance reports are being filled in with the required information elements and reference and location information is complete and accurate. Maps and photographs accompany many of the reports. Non-compliances reported by the industry are followed-up by OMNR conducting verification inspections. The FOIP system is now designed so that notification is automatically sent via electronic mail to the compliance coordinator at AbitibiBowater Inc., thereby informing the company when OMNR has submitted reports to FOIP. Staff at OMNR are investigating and resolving nearly all non-compliance issues in a timely fashion. The auditor's sample of the OMNR-submitted reports demonstrated that approximately 25% of the sampled reports were not being submitted within the prescribed timeframes. The submission timelines are clearly stated in the Forest Information Manual. Similarly for the Company monitoring records, a sampling of the reports filed by Abitibi-Bowater Inc. and the qualified overlapping licensee confirmed that reports are completed in a satisfactory fashion and procedures outlined in the compliance plans are generally being followed, but may not necessarily be completed in a timely manner. Examination of the evidence demonstrated that approximately 30% of the routine compliance reports and reports of non-compliant situations have not been submitted within the timeframes specified in the Forest Information Manual andOMNR compliance policies. Delays in submitting some of the reports have been quite lengthy. **Discussion:** Both OMNR and the forest industry are required to follow the requirements of the Forest Information Manual, which makes reference to policy and procedure documents (e.g., *Forest Compliance Handbook*) and other related documents (e.g., annual compliance plans) that apply to the conduct of each organization's compliance monitoring program. These documents include a specific timeframe for

reporting, to which both organizations must adhere. Meeting these timelines ensures that compliance monitoring programs are conducted in an efficient and effective manner.
Conclusion: Both OMNR and AbitibiBowater Inc. should make a greater effort to ensure that compliance monitoring reporting is conducted to the standards outlined in the Forest Information Manual.
Recommendation 12: Ontario Ministry of Natural Resources in Dryden (Ignace Area) and AbitibiBowater Inc. must be more vigilant in ensuring that all compliance reports submitted by each respective organization are submitted within the timeframes outlined in the Forest Information Manual.

Recommendation #13
Principle 6. Monitoring **Criterion 6.2. SFL Holder Compliance Planning and Monitoring** **Procedure 6.2.1.4:** Examine whether the SFL has continued to maintain their overall forest management oversight role related to development and maintenance of the compliance plan and its implementation while ensuring the sustainability of the management unit in accordance with the approved FMP and has provided for the education and training of workers and overlapping licensees.
Background Information and Summary of Evidence: Six harvesting blocks were not inspected for compliance during the audit term. This situation was not apparent until Company staff were checking during the spring of 2010 to ensure that compliance monitoring for harvesting activities had been completed before subsequent renewal activities could begin, a policy requirement. Changeovers in staff at both AbitibiBowater Inc. and OMNR were contributing factors to the oversight, according to Company staff. Five of the blocks had been harvested during the 2007-08 season and one during the 2008-09 season. **Discussion:** According to OMNR policy, all operations are required to be inspected for compliance. Company staff have stated that they now have assigned an employee the task of tracking all blocks. Fortunately, there were no non-compliant situations found within the missed blocks when they were finally inspected, according to AbitibiBowater Inc. staff. None of the missed blocks were audited by OMNR staff. Despite these assurances from the Company, the auditors are concerned with this oversight and believe that a recommendation is warranted to ensure that such oversights do not re-occur due to unforeseen circumstances. **Conclusion:** The Company should develop an internal tracking system to ensure that all operations are inspected for compliance in accordance with its compliance plans. The system should be sufficiently robust to overcome unforeseen disruptions or changes to the Company organization.
Recommendation 13: AbitibiBowater Inc. shall develop an internal tracking system to ensure that all operations are inspected for compliance, in accordance with the requirements of *The Forest Compliance Handbook* and the Company's Compliance Plan.

Recommendation #14
Principle 6. Monitoring **Criterion 6.1 Compliance Planning and Monitoring** **Procedure 6.1.1:** Review the MNR District Compliance Plans in place during the term of the audit (consider FMP - criteria 3.5.10 as well) to determine how forest management activities were to be monitored for compliance by MNR and assess whether the actual level of the overall monitoring program was in accordance with the FMP/plans and whether it was appropriate based on evidence gathered through analysis of related criteria, including field audits.
Background Information and Summary of Evidence: The auditors found two compliance monitoring matters that require attention: (1) resolving longstanding "open" issues, one of which is more than four years overdue; (2) addressing the apparent large number (55) of inspection reports with "suspended" status According to OMNR, there were approximately 55 suspended blocks at the time of the audit, with some issues dating back to 2004. A sampling of the issues associated with the suspended blocks was conducted through FOIP. The auditors found that some of the outstanding issues may have already been resolved (OMNR's database was outdated in these cases) while others may require additional time to address. Many of the suspended blocks were operated by a qualified overlapping licensee (Buchanan Forest Products) which will be troublesome to address since the company has declared bankruptcy and since it has been determined that AbitibiBowater Inc. cannot be held responsible for the compliance shortcomings for the Buchanan-operated blocks. The suspended blocks primarily result from the curtailment of markets for hardwood products since 2008, which has left wood piled at roadside or blocks where harvesting activities have not been completed. AbitibiBowater Inc. has stated that all harvested wood that remains at roadside has been scaled for stumpage dues which have been paid. The FOIP reports also indicate that Buchanan FP has scaled all roadside wood in the blocks it operated. The auditors were informed that OMNR and AbitibiBowater are starting to address these longstanding issues for the blocks on which the Company operated. The situation with the Buchanan bankruptcy introduces more complexity to resolving the issues that remain outstanding on the blocks where that Company operated.
Discussion: The auditors learned that both AbitibiBowater Inc. and OMNR maintain databases on the status of the suspended blocks, however, it is apparent from discussions with both parties that the two databases do not mesh. Both parties have been meeting to discuss outstanding compliance matters, including suspended blocks, and the auditors encourage them to continue this dialogue. This dialogue must include reconciliation of their respective databases to ensure that both organizations agree what issues remain outstanding.
Conclusion: Both parties must address the longstanding open issues and reconcile their databases in order to ensure there is total agreement on the status of the suspended blocks.

Recommendation 14: Ontario Ministry of Natural Resources (Dryden) and AbitibiBowater Inc. shall jointly resolve the longstanding "open" compliance issues to satisfactory conclusions and reconcile their databases that record the number and status of the "suspended" operating blocks. Both organizations shall meet regularly for the purpose of monitoring progress on resolving issues related to the suspended blocks and updating their respective databases accordingly.

Recommendation #15

Principle 6. Monitoring

Criterion 6.4 Monitoring Indicators of Forest Sustainability

Procedure 6.4.1: Assess whether programs are in place and are being implemented to provide sufficient data for all indicators identified in the FMP.

Background Information and Summary of Evidence: The auditors examined the long-term harvest, renewal, and silvicultural effectiveness monitoring trends on the English River Forest, which are presented in the table below:

	Area (ha) (annualized)				
	Past Plans			Current Plan	
Operation	1989-1994 BR 1990-1995 EN	1994-1999 BR 1995-2000 EN	1999-2004 BR 2000-2004 EN	2004-2009 ENG	Annualized Average
Harvest (ha)	11,671	6,283	6,564	4,648	**7,292**
Renewal	6,251	7,018	3,955	6,593	**5,955**
Difference	**5,420**	**-735.5**	**2,609**	**-1,945**	**1,337**
Area declared FTG		6,632	13,411	8,545	9,529

Source: 2008-09 10 year Annual Report (Tables AR-7, AR-9)

The data suggests that there is a net annual accumulating area of 1,337 ha that is not being renewed. The untreated area represents a little more than 18% of the total area harvested.

During its field inspections, the auditors did not notice any large areas of untreated cutover, thus indicating that the apparent renewal "gap" may be a documentation or process issue. The auditors suspect the renewal shortfall may be attributed to a combination of two factors:

(1) harvested areas being left for natural renewal that have not been documented and reported in a timely fashion

(2) Errors in the harvest and renewal records, particularly with the amalgamation of the former Brightsand and English River Forests

Discussion and conclusion: Whatever may be the cause, there is a renewal gap appearing in the data that merits further investigation. The auditors have recommended that the Company examine the long-term renewal shortfall and the reasons for the low silvicultural success rate.

Recommendation 15: AbitibiBowater Inc. shall more closely examine the apparent long-term renewal shortfall and determine the factors that may be contributing to this outcome. A plan must be developed and implemented to correct the shortfall.

Recommendation #16

Principle 6. Monitoring

Criterion 6.3 Silvicultural Standards and Assessment Program

Procedure 6.3.2: Assess whether the SFL/management unit assessment program is sufficient and is being used to provide the required silviculture effectiveness monitoring information including whether it

- assesses overall effectiveness of treatments, including those that are exceptions to silvicultural guides i.e. documented program, survey methodology such as survival, stocking, free-to-grow surveys, records, use and evaluation of results e.g. appropriateness of treatment for actual site conditions
- determines the need for and the type of remedial action required if an area is not successfully regenerated (e.g. in fill plant, tending)
- assesses reasons where eligible areas are not determined to be successfully regenerated and addresses these situations
- is appropriately used to update the FRI
- assesses progress towards achieving the management strategy

Background Information and Summary of Evidence:

The results of the FTG surveys are recorded annually in the Annual Reports (Table AR-14 under the 2004 FMPM and through GIS "coverages" only as of 2009), and are tracked by silvicultural treatment package. This format allows an evaluation to determine if the treatments were a "silvicultural success" (the objectives of the SGR treatment package were attained by reaching the FTG standard for the predicted forest unit) or a "regeneration success" (reaching the FTG standard for a forest unit other than predicted). Analysis of the results reported in the Year 10 (2008-09) Annual Report (covering the 2004-09 period) indicated that the level of silvicultural success overall is unsatisfactory at 29%. In its report, the Company postulates that the mediocre results may not be as serious as they first appear, but has not carried out any formal examination to establish which specific treatments are not achieving their objective regeneration standards.

Discussion: Understanding the causes behind the low silvicultural success achievement is critical and may

potentially influence future management direction at many levels. For example, the results of the analysis could play a useful role for rationalizing and adjusting certain input parameters for future forest modeling exercises, such as successional pathways and post-harvest renewal rates. The results could also impact silviculture treatment prescriptions for certain forest unit/ecosite combinations in order to ensure silviculture success. **Conclusion:** The mediocre silviculture success rates are cause for concern and certainly merit further analysis into possible reasons for these outcomes.
Recommendation 16: AbitibiBowater Inc. shall undertake an analysis to ascertain reasons for the low achievement in silviculture success results from recent free-to-grow surveys and make adjustments to their silviculture program to improve the success rates.

Recommendation #17
Principle 8. Contractual Obligations **Criterion 8.1 Wood Supply Commitments, MOAs, Sharing Arrangements, Special Conditions** **Procedure 8.1.2.1:** Determine whether wood supply commitments and any special conditions have been complied with, including completing any required MOAs or sharing arrangements.
Background Information and Summary of Evidence: Appendix E in SFL #542554 contains eight wood supply commitments. None of these reflect current demands for wood from this forest. Three of the commitments have been cancelled by the Minister.
Recommendation 17: Ontario Ministry of Natural Resources shall revise the wood supply agreements listed in Appendix E of SFL #542454 to reflect current wood supply demands.

APPENDIX 2 – ACHIEVEMENT OF MANAGEMENT OBJECTIVES

This assessment of achievement of management objectives itemizes those objectives identified in the 2004-2014 FMP. The auditors have evaluated performance in achieving those objectives against evidence collected on the audit through document review and interviews of Company and OMNR personnel and other stakeholders. Information presented in the Year 10 Annual Report (2008-2009) for this forest and in the more recent 2009-2019 FMP has been reviewed.

The auditors have specified the 2009 FMP in this table when this document is being specifically referenced.

Table 2. Review of Achievement of 2004 FMP Objectives.

Objective & Target/Indicator	Audit Assessment
Objective A1 : Landscape Diversity - To move towards a natural landscape pattern, structure, composition and function as it would occur in a natural, fire-driven ecosystem Target: To move towards a natural landscape pattern that resembles one created by fire	The 2009 FMP discusses the definition of the natural landscape pattern and movement towards it based on implementation of the 2004 FMP. Caution is raised as the forest will move away from the target if harvest is not conducted as planned. As it is, the plan moves towards the target in all but three categories (< 100 ha blocks, 101-200 ha blocks and >5,000 ha blocks). The attempt to fully conform to this objective will be challenged by the need to maintain a harvest, and to allocate harvest in a manner that reasonably accommodates other influences. *However, the audit team accepts that the managers are meeting the intent of the target, and that harvest is being allocated in a manner that will support the move towards a natural landscape pattern.*
Objective A2: Old Growth - To identify, consider, and provide for the forest age class structure needed to maintain functional old growth ecosystem conditions on forest units within their geographic ranges as part of the future forest conditions. Targets: - Quantitative targets will be derived from natural benchmark run considering historic and current forest condition and socioeconomics. - To contribute to the maintenance of red and white pine in their natural geographic ranges by maintaining no less that the 1995 amount of red and white pine, while permitting a sustainable harvest of red and white	The FMP recognized that forest management activities had no control over the non-managed area of Crown land. Old growth targets set in the 2004 English River Forest FMP were considered by the last auditors as an "under-achievement". The planning team and advisors set out to derive more appropriate old growth desired levels and targets for the 2009 FMP. Although there are some long term issues and the relative level of old growth is still low, the planning team did reach a reasonable balance given the current forest structure. In the Supplementary Documentation there was an "apparent" decrease in the red pine working group (PR) since the 2004 FMP. This was identified in the 2009 plan as an issue to be

pine in the future. In 1995 there were 793 ha of red and white pine working groups located on the "all Crown Land" classification, including parks, managed, and unmanaged land.	resolved for the next plan. Although white pine seems to be responding to the management strategy, the red pine response is less apparent. It is possible, that this is an artifact of a change in the inventory and not a true silvicultural issue. The audit has made a recommendation requiring the company to address this issue. (Recommendation 3) *With the recommendation concerning the area of red pine on the forest, the auditors are satisfied that these targets are being reasonably met.*
Objective B1: Forest Industry – To provide continuous and predictable, economical supply of timber to the forest industry, acquired through environmentally sound practices.	Due to drastically reduced demand, there was no need to meet the wood volume target. Overall harvest levels were 42% of that planned. All demand for timber supply was met. The following is quoted from the 2008-2009 Annual Report, "The Abitibi-Consolidated paper mill in Kenora permanently closed in December 2005. The Bowater sawmill in Ignace indefinitely idled in 2006. The Abitibi-Consolidated Fort William paper mill in Thunder Bay was permanently closed in 2007. The Buchanan Group of Company's Mackenzie Forest Products sawmill in Hudson and Atikokan Forest Products sawmill in Atikokan were idled in November, 2007 and Buchanan Forest Products Ltd (BFPL) declared bankruptcy and ceased harvesting activities during the same month. The Domtar paper machines in Dryden permanently closed in 2008. The Domtar sawmill in Ear Falls permanently closed in 2009". The objective includes a requirement for timber to be provided economically, and most of the timber-producing companies have gone out of business or stopped accepting timber from this Forest. It is, therefore, hard to conclude the objective is being fully met. The audit team recognizes there are many factors that contribute to the price of available wood that are outside the control of the Company. The Crown has initiated several initiatives that will start to address this situation. *The auditors conclude the strictly defined target has been met, but the objective of economical supply of timber is not a current accomplishment.*
Objective B2: Personal Use of Forest Products	This is a qualitative target. *As indicated in the*

- To make available incidental volumes of timber for such uses as fuelwood, building logs, fence post material, and timber for other personal uses. Target: To provide opportunities for incidental volumes of timber for such uses as fuelwood, building logs, fence post material and timber for other personal uses.	*Year 10 Annual Report, wood has been made available for personal use.*
Objective B3 : Tourism – To maintain the viability of the tourism industry by protecting tourism values in the development of this forest management plan through the application of the Timber Management Guidelines for the Protection of Tourism Values and the use of resource stewardship agreements as a method of projecting and sustaining these values. Target: Meet the negotiated conditions developed for tourism values in existing agreements to ensure the continued economic viability of the resource-based tourism economy.	The company has signed two resource stewardship agreements over the course of the audit term and offered consultation opportunities with 73 tourism operators. Most tourism operators have chosen to have their values protected via negotiated AOCs. *This target has been met.*
Objective B4 : Other Commercial Usage (non timber) – To conduct forestry operations in a manner that considers and respects the other businesses that are located on, or utilize resources within, the English River Forest (trappers, bait harvesters, wild rice harvesters, etc.)	This is a largely immeasurable target. The audit interviewed representatives of this sector and provided opportunity for others to comment. No negative comments were received. *Given the absence of evidence to suggest the target was not met, the audit team concludes that it has been reasonably addressed.*
Objective B5: First Nations Involvement –To work with local First Nations communities to identify and implement ways to maintain the inherent social and economic benefits to native peoples who traditionally use the forest for subsistence and spiritual values. Target: -encourage First Nations involvement in the forest management planning process - protect First Nations values identified for the planning process by First Nations	In interviews held with Lac des Milles Lac and Wabigoon Lake First Nations, both communities indicated that their values are identified and protected on the Forest. While the Ojibway Nation of Saugeen has never provided any values to OMNR, there is no record of any complaints as to impacts on their values during the period of the audit. Lac des Milles Lac First Nation indicated that they are very satisfied with how their interests are addressed by both OMNR and AbitibiBowater Inc. Abitibi-Bowater Inc. continues to purchase seedlings from Wabigoon Lake First Nation. *This objective is being met.*
Objective B6: To conduct forestry operations within the English River Forest in a manner that provides consideration for values of private property on private lands.	Boundaries have been established on maps, and boundary marking around operations appears to have met the requirements of this target. There were no complaints received on this target. *The*

Target: no adverse effects to private property or patent lands from forestry operations	*auditors conclude the target has been met.*
Objective B7: Public Access and Recreational Opportunities Target: Provide continued opportunities for public road access through continued road development and road maintenance , where appropriate	Roads continued to be developed, monitored, and maintained on the Forest. The company showed clear consideration of public access in their assignment of road improvement activities. *This qualitative target has been met.*
Objective B8: Provincial Parks, Conservation Reserves, and Natural Heritage Features Target: Ensure that no negative effects occur to provincial parks, conservation reserves, and heritage features as a result of forestry operations	*The mapping of values, and the application of appropriate AOCs near these values, have effectively met this target.*
Objective B9: Cultural Heritage: To protect cultural heritage sites from damage or conditions that will increase rates of deterioration while minimizing fibre loss and archeological mitigation costs. Target: Protect cultural heritage values from disturbance due to forest management operations	*This target has been met by mapping sites accurately and applying AOCs when working nearby.*
Objective C1: Caribou Habitat – To maintain a continuous supply of suitable, mature, year-round habitat distributed both geographically and temporally across the landscape in such a manner as to ensure permanent range occupancy within the bounds of natural variation. Target: Maintain continued range occupancy for woodland caribou on the English River Forest	The importance of older forest to caribou is critical. It is likely that in its current range, there is more old conifer forest today than will occur in future. This observation from the FMP is based on long term harvest planning projections in the region, both spatially and non-spatially in SFMM. Fire suppression has likely caused this large proportion of mature and old forest across the northern SFLs. It is the position of the planning team and the regional staff that habitat capability is not declining in the region. To address this situation, the woodland caribou spatial target in the FMP aims "to maintain at least plan start values to plan end (2019) forest in the caribou zone in a condition suitable to allow permanent range occupancy of forest-dwelling woodland caribou." The habitat at the start of the plan was 282,200 ha, while at the end of the plan it will be 475,295 ha. Discussion with regional and district staff was helpful. Full implementation of the plan and all of its

	objectives in a timely way will be required for the mosaic approach to have a chance to be effective. In particular, good silviculture will produce good caribou habitat. *The auditors have made two recommendations that are related to this objective. Assuming these are addressed, the auditors conclude that this objective has been met.*
Objective C2: Martin Habitat: To maintain a forest landscape pattern over time that will supply habitat for wildlife species (including marten) associated with mature and overmature forests, cavity trees, and coarse woody debris. Target: Maintain 10-20% of the Forest which has the capability to produce marten in suitable conditions as described in the Forest Management Guidelines for the Provision of Marten Habitat (1996)	Marten Core area requirements are met, despite some fragmentation of the Forest. The marten spatial target is to have 10-20% of the Forest which has the capacity to produce marten in core areas 3,000-5,000 ha in size, each composed of a maximum amount of suitable habitat by 2029. The FMP states it would be possible, if all harvest was deferred on the Forest, to retain approximately 19.3% of the managed land base as suitable habitat in marten core areas. In fact, the plan delivers 15.4% of the Forest in core areas in the first 20-year period, 15.3% in the 20-40 year period, and 10.7% in the 40-60 year period (FMP 3.6.4). The FMP balances the caribou and marten requirements, with wood supply (FMP p.110). The plan openly discusses the problems with not meeting the 75% suitable habitat level within cores. The explanation was reasonable, and reaching a relatively high 15% for the first 40 years compensated to some extent. *The target has been met.*
Objective C3 Moose Habitat: To maintain a continuous supply of suitable year-round habitat for moose across the landscape, within the bounds of natural variation. Target: maintain the preferred foraging and winter/cover habitat for moose over time.	Moose summer habitat saw an increase of 27,822 ha during the audit term and winter habitat showed a decrease of 17,849 ha. The total habitat available is sufficient across the Forest and has been projected to maintain that status. *The target has been met.*
Objective C4: Eagles, Ospreys, Herons – To prevent deleterious effects to eagle, osprey, and heron reproduction and loss of nesting sites Target: - No loss of current nesting sites as a direct result of forest management activities applied through this FMP - No disruption to bird reproduction as a direct result of forest management	Nests have been mapped and suitable AOCs applied near identified nest sites. *This target has been met.*

activities applied through this FMP	
Objective C5: Other selected wildlife species – To ensure forest management activities of the selected management alternative does not threaten the availability of preferred habitat for the selected species.	As part of the planning process, there were ten wildlife species selected as surrogates for general habitat management. The target was to maintain these within 20% of the range of natural variation as modelled by SFMM (FMP p.96). The FMP was unable to meet this target. As stated: "As a result of the current age class structure and the need to harvest, it was not possible to develop a management strategy that would maintain current levels of habitat for select wildlife species in some near terms. Most notable is a decline in habitat for species favouring older forests, such as black-backed woodpecker, great grey owl, and marten over the first four 10-year terms (corresponds with an increase in habitat for those species that prefer younger forests)." This is due to the current age class structure of the Forest and representation of natural disturbance in the model. As age classes normalize through time, the habitat levels for these species rebound and remain relatively constant. The analysis package supported this assessment. Given the balance of demands that will be needed for caribou management, the auditors conclude the planning team has taken the right approach in allowing some declines in the selected species in the first four terms, followed by a rise over the long term. The target has not been met in the near term, but is suitably addressed in the FMP to consider planning for the target successful.
Objective C6: Fisheries Habitat and Water Quality – To maintain water quality and protect fisheries habitat within watersheds where forest management activities occur. Target: Protect water quality and fish habitat values, in accordance with the appropriate forest management guidelines and policies for protection of water quality and fish habitat	The auditors conducted a site inspection of 46 water quality AOCs. While there were minor issues noted on a few of them (false ditches resulted in Recommendation 9), the vast majority were found to be effectively protecting the aquatic habitat value. *This objective has been met.*
Objective D1: Cost-effective and Efficient Silviculture - To move towards the desired future forest condition through the implementation of a cost-effective and	The auditors issued six recommendations that directly or indirectly comment on the silvicultural program. Each of them individually addresses a minor deficiency in the program and it should be

efficient silviculture program. Target: Implement an efficient and cost-effective renewal program where contributions to the Forest Renewal Trust are $3.00-6.00/m^3 for conifer and $ 0.50-0.75/m^3 for hardwood.	stated, so as not to raise unnecessary alarm, that it is entirely likely that modest improvement in a few areas will correct all of the issues noted. Three of these issues relate to document management. Natural renewal is not being reported as required. The GPS-based data from aerial spraying should be evaluated more quickly. Two of the recommendations are aimed at directly improving growing trees and habitat. The audit has recognized that more rigor is needed in managing slash and debris, which will recover more "plantable sites", as well as improvement in management of pre-commercial thinning. These observations are both based on a small part of the silvicultural program. The final two recommendations deal with monitoring. The silvicultural effectiveness monitoring program needs to be applied more consistently. It is a program designed to confirm the effectiveness of silviculture, and it has been poorly implemented. Another recommendation approaches strategic significance, in that the data available indicates a long term renewal shortfall and low silvicultural success. The auditors balance the recommendations against the generally positive observations made on site throughout the audit. There were very few sites, based on field inspections, that were not regenerating as expected. Ultimately, this is the evidence on which the audit team puts most weight in concluding that the silviculture program implemented is effective. The auditors also note that the size and scope of the program, including forest renewal and FTG monitoring, has been implemented in accordance with harvest levels. *The Company has met its trust fund maintenance obligations, and the auditors accept this as evidence that the program has met the requirement for efficiency.* *The auditors are concerned with the shortfall in*

	silvicultural success (Recommendation 16) which must be addressed before this objective can be met.
Objective D2: To implement a renewal and tending program that provides merchantable timber products from the Forest. Target: Develop a silvicultural program that emphasizes the production of suitable material (i.e., pulp, sawlogs, veneer)	On the majority of sites inspected, renewal efforts have been successful in meeting these targets. Recommendations are discussed in the comments on D1 (above). The audit has noted, in recommendations 15 and 16, a concern with the reporting level of regeneration and silvicultural success. *Pending an effective response to noted recommendations, the objective has been met.*
Objective D3: Red and White Pine Forest Ecosystems – To move towards more natural representations of red and white pine forest ecosystems as would occur in a natural fire-driven ecosystem representative of the English River Forest. Target: - Increase the presence of red and white pine on the Forest over the next 100 years and the managed productive English River Forest landbase - Plant seedlings where appropriate site conditions exists - Increase the amount of red and white pine seed source to provide seedlings for planting stock	The auditors have issued Recommendation 3, requiring the company to evaluate the noted decline in the red pine working group on the Forest. Initial evidence suggests this may be an artifact of interpretation of the FRI. The auditors consistently observed white and red pine being protected on harvest sites and left to provide a source of seed for the regenerating forest. The auditors noted that red and white pine seedlings were planted on suitable sites. White and red pine seed was collected. *The auditors conclude that this objective has not been met.*

APPENDIX 3 – COMPLIANCE WITH CONTRACTUAL OBLIGATIONS

Licence Condition	Licence Holder Performance
Payment of Forestry Futures and Ontario Crown charges	The Company's payments are up to date as of March 31, 2010.
Wood supply commitments, MOAs, sharing arrangements, special conditions	There are eight wood supply commitments listed in the SFL document for this forest. Three were cancelled at the time of the audit. No mills have accepted their full allocation for a minimum of two years. The audit recommends that the Appendix E of the SFL be updated to reflect current conditions and agreements (Recommendation # 17) .
Preparation of FMP, AWS and reports; abiding by the FMP, and all other requirements of the FMPM and CFSA	Preparation of the FMP, annual work schedule, and annual reports were completed in accordance with the requirements of the FMPM. There has been a notable improvement in performance in this area since the last independent forest audit. Compliance reports were not always on time if the inspection found everything to be in conformance. Compliance reports with negative findings were consistently submitted within the required timeframes.
Conduct inventories, surveys, tests and studies; provision and collection of information in accordance with Forest Information Manual	The Company has met the minimum Forest Information Manual requirements. A new forest inventory has been initiated. Aerial photography and ground verification has been completed but is not expected to be fully rationalized for another two years. The audit has recommended that the OMNR make the digital photography available to the OMNR District and Company staff in the interim.
Wasteful practices not to be committed	The auditors did not observe wasteful practices other than those reported in compliance reports. In general harvest sites were clean of industrial garbage and utilization of softwood species was very good. Hardwood utilization was less effective, but, in the auditors' opinion, hardwood material with a market was as good as could be expected given poor market conditions.
Natural disturbance and salvage SFL conditions must be followed.	The license conditions regarding natural disturbance and salvage harvesting were followed. Salvage harvesting was conducted in 2005-06 (342 ha), 172 ha in 2007-2008.
Protection of the licence area from pest damage, participation in pest control programs	No pest management programs were completed on this forest.
Withdrawals from licence area	No areas were withdrawn from this forest during

	this audit term.
Audit action plan and status report	The action plan dealt with each of the 41 recommendations and seven suggestions from the previous independent forest audit. The audit team was impressed with the thoroughness of the response from OMNR and the Company to the last audit.
Payment of forest renewal charges to Forest Renewal Trust (FRT)	Payment of forest renewal charges to the Forest Renewal Trust have met the minimum balance as required.
Forest Renewal Trust eligible silviculture work	Field inspections of the 2008-09 confirmed that the silvicultural operations were consistent with forest operations prescriptions and were eligible for trust fund reimbursement. Maps and records were available.
Forest Renewal Trust forest renewal charge analysis	The renewal rates were reviewed and adjusted to ensure sufficient funds were available to meet the requirements of the silvicultural program
Forest Renewal Trust account minimum balance	Payment of forest renewal charges to the Forest Renewal Trust have met the minimum balance as required.
Silviculture standards and assessment program	Silvicultural standards were maintained at an acceptable level. The auditors identified a gap in reporting and have issued two recommendations to address this (Recommendations 15 and 16).
Aboriginal opportunities	Two of the three First Nations with traditional territory in the English River Forest were consulted by the audit team. The third did not respond to auditor queries. Both Lac des Milles Lac and Wabigoon Lake First Nations indicated that their values are identified and protected on the Forest. Lac des Milles Lac First Nation indicated that they are very satisfied with how their interests are addressed by both OMNR and AbitibiBowater Inc. AbitibiBowater Inc. has continually supported the Wabigoon Lake Tree Nursery (Wabigoon Anishnabe Gitigewin) by purchasing a large number of seedlings each year. Much of the purchase is directed towards the English River Forest. There was no harvesting during the period of the audit on the Forest by First Nations companies.
Preparation of compliance plan	Preparation of the compliance plan met the contractual obligations.
Internal compliance prevention/education program	The internal compliance program met contractual requirements.
Compliance inspections and reporting;	Compliance inspections by the Company were

compliance with compliance plan	generally well done. One group of blocks was not inspected during operations. This was noted by the company and a non-compliance declared. (Recommendation 14)
SFL forestry operations on mining claims	Notices were provided to all mining claim holders with operations within the English River Forest.

Review of Previous Audits' Recommendations

The previous independent forest audit was completed in 2005. The audit identified 41 recommendations and, significantly, did not recommend that the SFL license be extended for an additional five years.

This audit reviewed the response of the Company and the OMNR to the previous audit report.

It is clear that the recommendations and suggestions identified in the audit report have been carefully considered by both the OMNR and the Company. The auditors were impressed with the thoroughness of the response generated to the audit report.

The previous audit issued 16 recommendations concerning the preparation or completeness of the FMP. It was clear that the FMP development process was significantly improved for 2009. Planning team meeting minutes reflect a well managed process, and task team assignment and management was effective. Two recommendations were issued targeting the FMP process in this audit. One directs the Company asked to investigate an apparent decline in the amount on red pine on the Forest. There is some evidence that the decline is an artifact of inventory classification but, if the decline is real, it needs to be addressed. The other planning recommendation requires OMNR to correct the practice of having planning team participants and advisors also act as plan reviewers. In all other respects, the audit team found the recommendations concerning planning had been suitably addressed.

The previous audit required the Company and OMNR to validate the yield curves used on the forest. In the opinion of this audit team, the response to this recommendation was rigorous. External experts were engaged to recreate yield curves. A workshop was held to develop "a set of principles" that would be used as the basis for yield curve development. A joint task force was created to create the base curves for the Forest. The review of the final yield curves was thorough. The auditors note that the most recently completed Annual Report (2008-09) shows that the actual average yield from harvest operations was 133 m^3/ha, suggesting that the revised curves are significantly improved.

The 2005 audit had five recommendations targeting compliance performance on the Forest. This audit found the OMNR compliance effort to be exceptionally good. The Company program was also effective. This audit has recommended that the Company and OMNR reconcile their compliance databases to ensure they are tracking suspended blocks.

There were several recommendations issued that required improved adherence to reporting standards. Performance in this area has been improved.

APPENDIX 4 – AUDIT PROCESS

The auditors collected evidence through document review, interviews with staff and stakeholders, and physical inspection of field activities that occurred on the English River Forest between April 1, 2005 and March 31, 2010. The audit process began with a pre-audit meeting and site selection meeting in Ignace on June 22, 2010. The purpose of the meeting was for the lead auditor, AbitibiBowater Inc., and OMNR to discuss audit logistics and for the lead auditor to collect background information and documents for the audit. Following the meetings, an audit plan was finalized and distributed that outlined the audit schedule and identified the main contacts for the audit.

From August 1 to September 12, the audit team reviewed documents describing forest management activities on the English River Forest through the audit period. Interviews were held with a variety of interested parties. Personnel from the Company and OMNR were interviewed throughout the audit. Most of these interviews took place in person, but contact by phone and e-mail between the audit team, auditees, and the public was common.

Field site visit locations were selected to evaluate harvest, renewal, tending/maintenance, FTG operations, AOCs, road construction and maintenance, site preparation, water crossings, wildlife management activities, and other areas of special interest. Sites that had multiple audit values (e.g., renewal and AOC) were preferentially selected. Field sites were also selected to ensure that all geographic areas of the ERF were observed and to ensure that evaluations of winter and summer operations were representative of actual operations and included representative sites for the operations of each of the overlapping licensees. On-site and field audit activities occurred between September 12 and September 17.

The audit team verified records and information systems in the AbitibiBowater Inc. and OMNR offices. The team split into two or three field crews at different times, each of which was accompanied by English River Forest or OMNR staff. Sampling was completed through 14 person days of field inspections. Sampling continued until the auditors had viewed all of the selected sites and were satisfied that they had viewed enough sites to be confident in their assessment of field performance.

Table 3 shows the total amount of each key activity that has occurred on the English River Forest during the audit period, total area of the sites visited, and the sample size as a percentage of the total area. The audit protocol requires the audit team to sample a minimum of 10% of the area treated during the audit period, and to increase the sample where higher risk activities were identified (Table 4).

Table 3. Sampling intensity of the audit.

Activity	Total Area in Audit Period (ha)	Total Area Sampled (ha)	Sample intensity %
Depletion	16,760	2,257	13

Mechanical Site Preparation	11,585	2,524	22
Chemical Site Preparation	922	103	11
Tree Planting	10,649	1,390	13
Seed	7,730	2,178	28
Natural	12,921	1,701	13
Release	13,555	1,934	14
Pre-commercial Thinning	1,431	649	45
FTG	39,955	5,148	13

Table 4. Independent Forest Audit Procedures Audited by Risk Category.

Procedures Audited, by Risk Category								
Principle	Low Risk			Medium Risk			High Risk	Comments
	Applicable (#)	Selected (#)	% Audited	Applicable (#)	Selected (#)	% Audited	Audited (#)	
1. Commitment	2	2	100	2	2	100	100	All procedures were audited
2. Public Consultation and Aboriginal Involvement	6	6	100	6	6	100	100	All procedures were audited
3. Forest Management Planning	27	27	100	27	27	100	100	All procedures were audited
4. Plan Assessment and Implementation	6	6	100	6	6	100	100	All procedures were audited
5. System Support	2	2	100	2	2	100	100	All procedures were audited
6. Monitoring	4	4	100	4	4	100	100	All procedures were audited
7. Achievement of Objectives and Forest Sustainability	5	5	100	5	5	100	100	All procedures were audited
8. Contractual Obligations	20	20	100	20	20	100	100	All procedures were audited
Totals	72	72	100	72	72	100	100	

The audit protocol allows the auditors to subsample procedures identified as low and medium risk in terms of contributions to the sustainability of the forest. Given that the audit team reviewed the content, process, or outcome of each of these procedures in their assessment of those procedures deemed high risk, the auditors elected to audit all procedures pertinent to the SFL.

AOC and Roads Inspections

In total, 73 AOC prescriptions and other values from the 2004 and 2009 plans were examined. Observations were recorded on 45 water quality AOCs, including shoreline buffers and water crossings; 5 buildings, including tourist facilities; 6 moose values; 2 park boundaries; 3 nest sites; 3 permanent sample plots, and 3 other values. This level of sampling represents the AOCs on 44 of the chosen blocks. With an overall sampling intensity of 10%, the total AOC sample is approximately 4.4%.

In addition, the audit team travelled extensively on the road system in the ERF and observed operational road conditions on primary, secondary, and operational roads.

Summary of Consultation and Input into the Audit

General Public: A survey was sent to 563 stakeholders on August 1 using the mailing list that the OMNR District maintains for the English River Forest . The audit team received 46 responses to the survey by mail and three by e-mail. Additionally, invitations to comment on forest management on the Forest over the audit term were placed in two local newspapers. The responses identified three areas on the SFL that that the audit team included on their field inspections.

Local Citizens' Advisory Committee: Phone or in-person interviews were held with all LCAC members. This LCAC is specific to the English River Forest. For the period of the audit, the LCAC was comprised of a diverse mix of individuals, including representatives from: environmental/naturalist organizations, the forest products industry, loggers, the general public, aboriginal groups, cottagers, anglers and hunters, prospectors, and tourism interests.

First Nations: There are three First Nations with traditional territory in the English River Forest: Lac des Milles Lac First Nation, the Ojibway Nation of Saugeen and Wabigoon Lake First Nation. Interviews during the audit were held with several individuals representing Wabigoon Lake First Nation and an individual representing Lac des Milles Lac First Nation. Several attempts were made to set up a meeting with the Ojibway Nation of Saugeen but none of the calls were returned.

Ontario Ministry of Natural Resources: The OMNR district manager, area supervisor, area forester, area biologists, and technician participated in the opening and closing meetings of the field audit, as well as the field audit itself. Regional OMNR staff attended the opening meeting, one day in the field, and the closing meeting. One main office OMNR staff member attended four days of the field audit.

Abitibi Bowater Inc. The following staff participated in the audit: (Planning Superintendent), (Renewal Superintendent), (Planning Manager), (Forestry Manager- Ontario), (Production Superintendent), (Operations Forester), and (Operations Coordinator).

APPENDIX 5 – LIST OF ACRONYMS

AOC	Area of Concern
AHA	Available Harvest Area
AWS	Annual Work Schedule
CFSA	Crown Forest Sustainability Act
FMP	Forest Management Plan
FMPM	Forest Management Planning Manual
FOIP	Forest Operations Information Program
FRI	Forest Resource Inventory
FTG	Free-to-Grow
LCAC	Local Citizens Advisory Committee
NRVIS	Natural Resource Values Information System
OMNR	Ontario Ministry of Natural Resources
RPF	Registered Professional Forester
SFL	Sustainable Forest Licence
SFMM	Strategic Forest Management Model
SGR	Silvicultural Ground Rules

APPENDIX 6 – AUDIT TEAM MEMBERS AND QUALIFICATIONS

Craig Howard, R.P.F., CEA (SFM) – Lead Auditor

Education:	B.Sc. Forestry, University of New Brunswick, 1983.
Experience:	26 years experience in forestry, 12 years in private practice, 3 years in the OMNR.
Previous Audits:	21 Independent Forest Audits, 13 Sustainable Forest Initiative verifications, 10 Forest Stewardship Council assessments.

Mark Leschishin, R.P.F – Forester

Education:	B.Sc. Forestry, Lakehead University, 1978. Dip. For. Tech., 1974.
Experience:	32 years experience in forestry in Ontario.
Previous Audits:	23 Independent Forest Audits, one Forest Stewardship Council assessment.

Tom Clark – Ecologist

Education:	M.Sc., H.B.Sc.
Experience:	Forest ecologist and biologist with 30 years experience in habitat ecology.
Previous Audits:	24 Independent Forest Audits, and numerous Forest Stewardship Council assessments and audits.

Phil Shantz – Socio-economist

Education:	M.E.S, R.P.P.
Experience:	Registered professional planner with 16 years experience in forest auditing/certification, resource and socio-economics, environmental assessment and public consultation.
Previous Audits:	14 Independent Forest Audits, 15 Forest Stewardship Council assessments.

Brian Callaghan, R.P.F. – Forest Management Planning Analyst

Education:	B.Sc.F., University of Toronto, 1982.
Experience:	25 years experience in forestry in Ontario.
Previous Audits:	20 Independent Forest Audits, 12 Sustainable Forest Initiative verifications, 9 Forest Stewardship Council assessments.

APPENDIX 7 – REFERENCE TO THE YEAR 10 ANNUAL REPORT FOR THE ENGLISH RIVER FOREST (2008-2009)

This report can be found on the OMNR web site mnr.gov.on.ca

The following links on that website lead to the Year 10 Annual Report for this forest: **HOME** > **Ontario's Forests** > **Forest Management Planning in Ontario** > **Forest Management Plans** > **Find a Forest Management Plan** > **English River Forest - 230 (effective on 2004/04/01)**